

PRESEQUENCE

OMI SEQ.#	SEQ.#	HIGH LIMIT	LOW LIMIT
64-040,41,42	01349	1283.98	170

~~NONE~~

Seq 64-020 must be redone, maybe -

~~Add Dev (Perm.) to reset timers for 24, 48, 72  
hr forward,~~

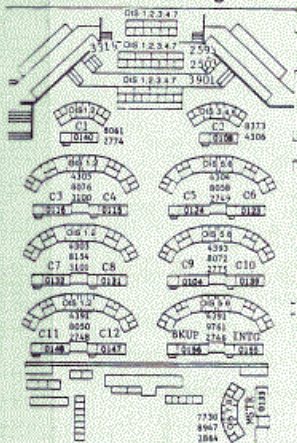
for a undefined tanks, turn GDCSTIM1 OFF

Initial  
Scrubs  
Turned

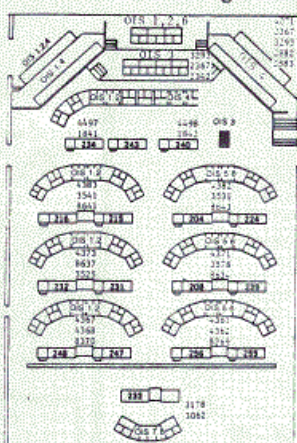
# Launch Control Center

CONTACT: G.GRAY 7.501

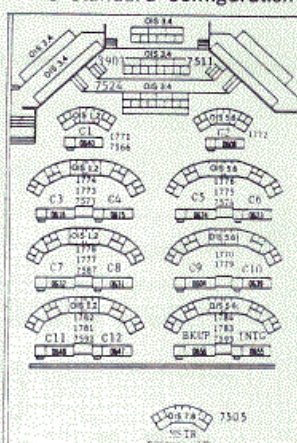
## FR-1 Standard Configuration



## FR-2 Standard Configuration



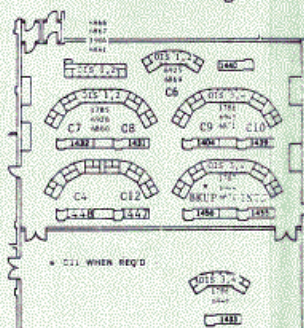
## FR-3 Standard Configuration



## QC CONTACTS FOR FIRING ROOMS

AREA	PHONE NUMBER
QC FR 1	1954 8198
QC FR 2	2119 3549
QC CR 3	7985 7986
QC CR 4	8355 9667

## FR-4 Standard Configuration



ELEMENT CONFIGURATION FIRING RM 1

<input type="checkbox"/> INTEG TEST <input type="checkbox"/> STS # 30 <input type="checkbox"/> SRB TAIL #099 <input type="checkbox"/> ORB FLT # <input type="checkbox"/> LT SRB # <input type="checkbox"/> RT SRB # <input type="checkbox"/> ESA <input type="checkbox"/> ORB SITE <input type="checkbox"/> OFF #48 <input type="checkbox"/> PAD #MISSION <input type="checkbox"/> TEST	<input type="checkbox"/> TEST SITE <input type="checkbox"/> KOFF 1 <input type="checkbox"/> KOFF 2 <input type="checkbox"/> KOFF 3 <input type="checkbox"/> KOFF 4 <input type="checkbox"/> KMP 1 <input type="checkbox"/> KMP 2 <input type="checkbox"/> KMP 3 <input type="checkbox"/> KMP 4 <input type="checkbox"/> KMP 5 <input type="checkbox"/> KMP 6 <input type="checkbox"/> KMP 7 <input type="checkbox"/> KMP 8 <input type="checkbox"/> ET SITE <input type="checkbox"/> VAB #B-2 <input type="checkbox"/> VAB #B-4 <input type="checkbox"/> TEOJ LOCATION <input type="checkbox"/> ASC <input type="checkbox"/> MSTR <input type="checkbox"/> SWAB	<input type="checkbox"/> PASD TANK SETS <input type="checkbox"/> 3 4 5 6 <input type="checkbox"/> GOU/FR SFR IGNTR <input type="checkbox"/> ET ANTI GESSER LINE <input type="checkbox"/> REMOVED <input type="checkbox"/> ET TYPE NHO INSTALLED <input type="checkbox"/> STBD <input type="checkbox"/> PORT <input type="checkbox"/> AFPAID A <input type="checkbox"/> AFPAID B <input type="checkbox"/> SHUTTLE ELEMENTS <input type="checkbox"/> ORB <input type="checkbox"/> SRB <input type="checkbox"/> ET
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ELEMENT CONFIGURATION FIRING RM 2

<input type="checkbox"/> INTEG TEST <input type="checkbox"/> STS # <input type="checkbox"/> ORB TAIL # <input type="checkbox"/> ORB FLT # <input type="checkbox"/> LT SRB # <input type="checkbox"/> RT SRB # <input type="checkbox"/> ESA <input type="checkbox"/> ORB SITE <input type="checkbox"/> OFF #48 <input type="checkbox"/> PAD #MISSION <input type="checkbox"/> TEST	<input type="checkbox"/> TEST SITE <input type="checkbox"/> KOFF 1 <input type="checkbox"/> KOFF 2 <input type="checkbox"/> KOFF 3 <input type="checkbox"/> KOFF 4 <input type="checkbox"/> KMP 1 <input type="checkbox"/> KMP 2 <input type="checkbox"/> KMP 3 <input type="checkbox"/> KMP 4 <input type="checkbox"/> KMP 5 <input type="checkbox"/> KMP 6 <input type="checkbox"/> KMP 7 <input type="checkbox"/> KMP 8 <input type="checkbox"/> ET SITE <input type="checkbox"/> VAB #B-2 <input type="checkbox"/> VAB #B-4 <input type="checkbox"/> TEOJ LOCATION <input type="checkbox"/> ASC <input type="checkbox"/> MSTR <input type="checkbox"/> SWAB	<input type="checkbox"/> PASD TANK SETS <input type="checkbox"/> 3 4 5 6 <input type="checkbox"/> GOU/FR SFR IGNTR <input type="checkbox"/> ET ANTI GESSER LINE <input type="checkbox"/> REMOVED <input type="checkbox"/> ET TYPE NHO INSTALLED <input type="checkbox"/> STBD <input type="checkbox"/> PORT <input type="checkbox"/> AFPAID A <input type="checkbox"/> AFPAID B <input type="checkbox"/> SHUTTLE ELEMENTS <input type="checkbox"/> ORB <input type="checkbox"/> SRB <input type="checkbox"/> ET
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ELEMENT CONFIGURATION FIRING RM 3

<input type="checkbox"/> INTEG TEST <input type="checkbox"/> STS # 31 <input type="checkbox"/> ORB TAIL #104 <input type="checkbox"/> ORB FLT # 2 <input type="checkbox"/> LT SRB # <input type="checkbox"/> RT SRB # <input type="checkbox"/> ESA <input type="checkbox"/> ORB SITE <input type="checkbox"/> OFF #48 <input type="checkbox"/> PAD #MISSION <input type="checkbox"/> TEST	<input type="checkbox"/> TEST SITE <input type="checkbox"/> KOFF 1 <input type="checkbox"/> KOFF 2 <input type="checkbox"/> KOFF 3 <input type="checkbox"/> KOFF 4 <input type="checkbox"/> KMP 1 <input type="checkbox"/> KMP 2 <input type="checkbox"/> KMP 3 <input type="checkbox"/> KMP 4 <input type="checkbox"/> KMP 5 <input type="checkbox"/> KMP 6 <input type="checkbox"/> KMP 7 <input type="checkbox"/> KMP 8 <input type="checkbox"/> ET SITE <input type="checkbox"/> VAB #B-2 <input type="checkbox"/> VAB #B-4 <input type="checkbox"/> TEOJ LOCATION <input type="checkbox"/> ASC <input type="checkbox"/> MSTR <input type="checkbox"/> SWAB	<input type="checkbox"/> PASD TANK SETS <input type="checkbox"/> 3 4 5 6 <input type="checkbox"/> GOU/FR SFR IGNTR <input type="checkbox"/> ET ANTI GESSER LINE <input type="checkbox"/> REMOVED <input type="checkbox"/> ET TYPE NHO INSTALLED <input type="checkbox"/> STBD <input type="checkbox"/> PORT <input type="checkbox"/> AFPAID A <input type="checkbox"/> AFPAID B <input type="checkbox"/> SHUTTLE ELEMENTS <input type="checkbox"/> ORB <input type="checkbox"/> SRB <input type="checkbox"/> ET
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ELEMENT CONFIGURATION FIRING RM 4

<input type="checkbox"/> INTEG TEST <input type="checkbox"/> STS # 32 <input type="checkbox"/> ORB TAIL #102 <input type="checkbox"/> ORB FLT # 3 <input type="checkbox"/> LT SRB # <input type="checkbox"/> RT SRB # <input type="checkbox"/> ESA <input type="checkbox"/> ORB SITE <input type="checkbox"/> OFF #48 <input type="checkbox"/> PAD #MISSION <input type="checkbox"/> TEST	<input type="checkbox"/> TEST SITE <input type="checkbox"/> KOFF 1 <input type="checkbox"/> KOFF 2 <input type="checkbox"/> KOFF 3 <input type="checkbox"/> KOFF 4 <input type="checkbox"/> KMP 1 <input type="checkbox"/> KMP 2 <input type="checkbox"/> KMP 3 <input type="checkbox"/> KMP 4 <input type="checkbox"/> KMP 5 <input type="checkbox"/> KMP 6 <input type="checkbox"/> KMP 7 <input type="checkbox"/> KMP 8 <input type="checkbox"/> ET SITE <input type="checkbox"/> VAB #B-2 <input type="checkbox"/> VAB #B-4 <input type="checkbox"/> TEOJ LOCATION <input type="checkbox"/> ASC <input type="checkbox"/> MSTR <input type="checkbox"/> SWAB	<input type="checkbox"/> PASD TANK SETS <input type="checkbox"/> 3 4 5 6 <input type="checkbox"/> GOU/FR SFR IGNTR <input type="checkbox"/> ET ANTI GESSER LINE <input type="checkbox"/> REMOVED <input type="checkbox"/> ET TYPE NHO INSTALLED <input type="checkbox"/> STBD <input type="checkbox"/> PORT <input type="checkbox"/> AFPAID A <input type="checkbox"/> AFPAID B <input type="checkbox"/> SHUTTLE ELEMENTS <input type="checkbox"/> ORB <input type="checkbox"/> SRB <input type="checkbox"/> ET
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Note: Changes to standard configuration are scheduled as delta's on support page.

Prepared by Lockheed Integrated Systems

## SLP07 MILESTONE/MAINLINE STATUS

ML	INT	LCC	DESCRIPTION	INITIATOR	TIME
-	-	LC-1	GO FOR T-9	M009	9/00
-	-	-	*0AA RETRACT	M0AA	7/30
-	-	LC-2	ORB APU START	M0PK	5/00
-	-	-	PURGE SEQ 4	MPS4	4/00
-	-	-	*ET LO2 PRESS	MLO2	2/55
-	-	-	*ET LH2 PRESS	MLH2	1/57
-	-	LC-3	GO FOR AUTO SEQ	M0SER	/31
-	-	LC-4	MAIN ENG START	M0ENA	/10
-	-	-	SRB IGNITION	M0SRB	/00

HOLD  
STD HOLD  
RSS HOLD

-  -  - VOTING LOGIC CHECKS

MIPS

SLPAO	0 - 7
SLPA1	8 - F
(10) SLPY0	0 - 4
SLPY1	5 - 6
SLPY2	7 - 9
SLP45	A - F
(25) SLP39	0 - 4
SLP40	5 - 7
SLP41	8 - F

ML VFY

SLPX0	0 - 7
SLPLO	8 - F

ML SEQ

SGPS2	13600
SGPT2	17210
SGPU2	20200
SGPV2	33303
SGPW2	26001 <i>223-00</i>
SLP26	32300

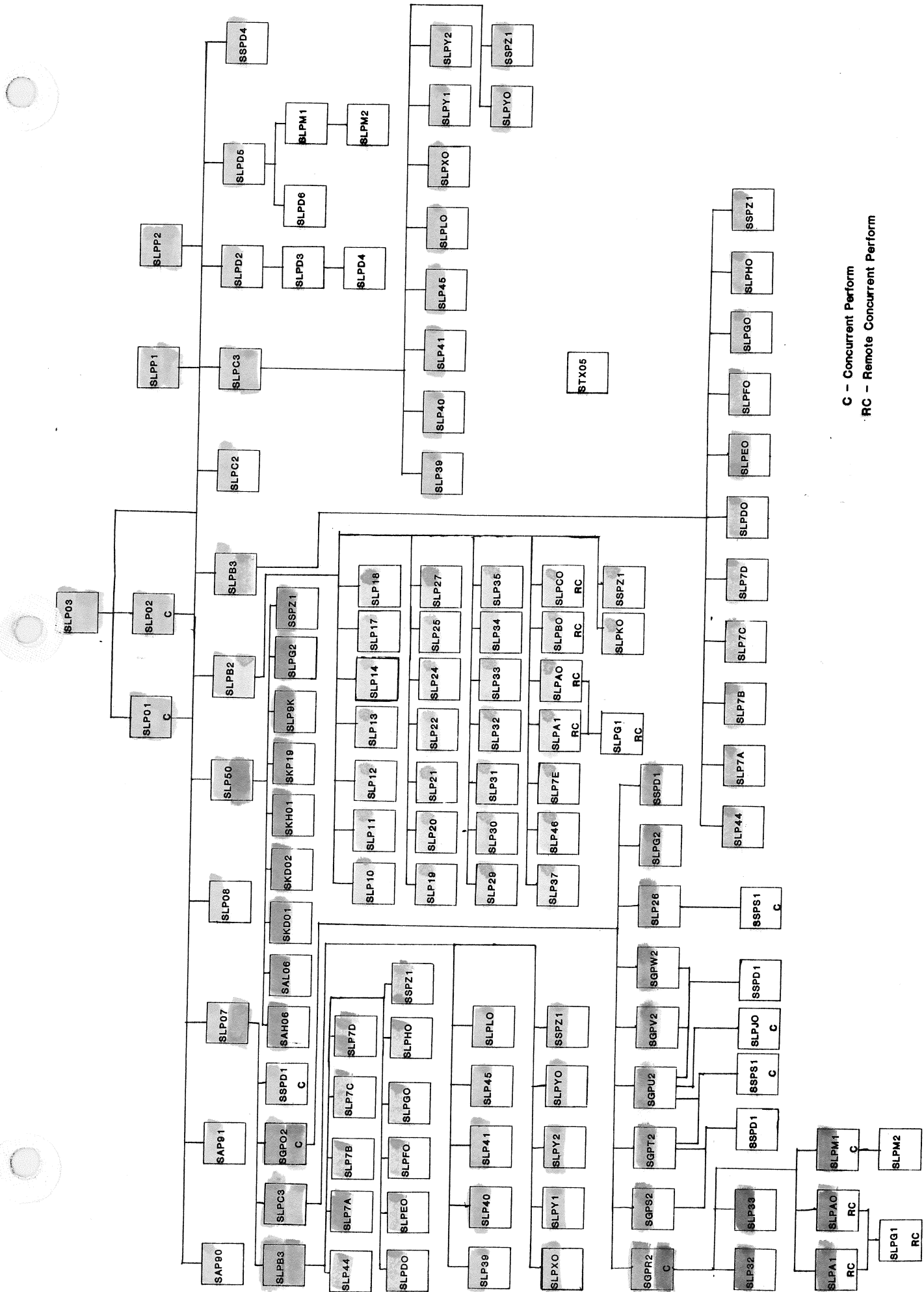
LIPS

SLPBO	0 - S
SLPCO	6 - F
(10) SLP7A	0 - 2
SLP7B	3 - 4
SLP7C	5 - 6
SLP7D	7 - 8
SLP44	9 - F
(15) SLPDO	0 - 2
SLPEO	3 - 4
SLPFO	5 - 6
SLPGO	7 - 8
SLPHO	9 - F

PGM      SYS      BYPASS

SLP10	BHYD	86
SLP11	HYD	96
SLP12	APU	83
SLP13	FCL	107
SLP14	<i>INTG/CENT</i>	-
SLP17	SSME	109
SLP18	GNS	95
SLP19	DPS	91
SLP20	WATR	112
SLP21	BPYR	89
SLP22	BELE	85
SLP24	BINS	87
SLP25	INST	99
SLP27	ECLS	92
SLP29	ARMS	84
SLP30	MPS	105
SLP31	FCP	94
SLP32	BRS	88
SLP33	TRS	111
SLP34	EPDC	93
SLP35	PVD	108
SLP37	NAVA	106
SLP7E	FCL-2	107
SLPKO	COMM	90





C - Concurrent Perform  
 RC - Remote Concurrent Perform





PROCEDURE	TYPE	REV#	*CALLED	*CALLING	*FD-NAME	COMP CRR	CONF CRR	HRR	CONF VCN	CONF TYPE	CONF SUBTYPE
SAP90	GOAL	52	SDP03	XYP58 SLP22 SLPP1 SLP03 SLP02 SLP01 XYP58 SLP22							
SAP91	GOAL	41	SDP91	XYP58 SLP22 SLPP1 SLP03 SLP02 SLP01 XYP58 SLP22							
SGP02	GOAL	88	SSPD1 SLPG2 SLP26 SGPW2 SGPV2 SGPU2 SGPT2 SGPS2 SGPR2 SLPM1 SLPA0 SLPA1 SLP33 SLP32 SDP04								
SGPR2	GOAL	123		SGP02							
SGPS2 SGPT2	GOAL GOAL	86 74	SSPD1 SSPS1	SGP02 SGP02							
SGPU2	GOAL	71	SSPD1 SSPD1	SGP02							
SGPV2 SGPW2 SLP01	GOAL GOAL GOAL	62 88 34	SLPJ0 SSPD1 SSPD1 SSPD4 SLPD5 SLPD2 SLPC3 SLPC2 SLPB3 SLPB2 SLP50 SLP08 SLP07	SGP02 SGP02 SLP03							
SLP02	GOAL	40	SSPD4	SLP03							



PROCEDURE	TYPE	REV#	*CALLED	*CALLING	*FD-NAME	COMP CRR	CONF CRR	HRR	CONF VCN	CONF TYPE	CONF SUBTYPE
SLP03	GOAL	36									
SLP05											
SLP07											
SLP08	GOAL	21									
SLP10	GOAL	35									
SLP11	GOAL	31									
SLP12	GOAL	36									
SLP13	GOAL	10									
SLP14	GOAL	25									
SLP17	GOAL	31									
SLP07	GOAL	122									
SLP08	GOAL	21									





PROCEDURE	TYPE	REV#	*CALLED	*CALLING	*FD-NAME	COMP CRR	CONF CRR	HRR	CONF VCN	CONF TYPE	CONF SUBTYPE
SLP00			SLP00	SLP07							
SLP01			SLP01	SLP02							
SLP02			SLP02	SLP03							
SLP03			SLP03	SLP04							
SLP04			SLP04	SLP05							
SLP05			SLP05	SLP06							
SLP06			SLP06	SLP07							
SLP07			SLP07	SLP08							
SLP08			SLP08	SLP09							
SLP09			SLP09	SLP10							
SLP10			SLP10	SLP11							
SLP11			SLP11	SLP12							
SLP12			SLP12	SLP13							
SLP13			SLP13	SLP14							
SLP14			SLP14	SLP15							
SLP15			SLP15	SLP16							
SLP16			SLP16	SLP17							
SLP17			SLP17	SLP18							
SLP18			SLP18	SLP19							
SLP19			SLP19	SLP20							
SLP20			SLP20	SLP21							
SLP21			SLP21	SLP22							
SLP22			SLP22	SLP23							
SLP23			SLP23	SLP24							
SLP24			SLP24	SLP25							
SLP25			SLP25	SLP26							
SLP26			SLP26	SLP27							
SLP27			SLP27	SLP28							
SLP28			SLP28	SLP29							
SLP29			SLP29	SLP30							
SLP30			SLP30	SLP31							
SLP31			SLP31	SLP32							
SLP32			SLP32	SLP33							
SLP33			SLP33	SLP34							
SLP34			SLP34	SLP35							
SLP35			SLP35	SLP36							
SLP36			SLP36	SLP37							
SLP37			SLP37	SLP38							
SLP38			SLP38	SLP39							
SLP39			SLP39	SLP40							
SLP40			SLP40	SLP41							
SLP41			SLP41	SLP42							
SLP42			SLP42	SLP43							
SLP43			SLP43	SLP44							
SLP44			SLP44	SLP45							
SLP45			SLP45	SLP46							
SLP46			SLP46	SLP47							
SLP47			SLP47	SLP48							
SLP48			SLP48	SLP49							
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SLP50			SLP50	SLP51							
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SLP61			SLP61	SLP62							
SLP62			SLP62	SLP63							
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SLP64			SLP64	SLP65							
SLP65			SLP65	SLP66							
SLP66			SLP66	SLP67							
SLP67			SLP67	SLP68							
SLP68			SLP68	SLP69							
SLP69			SLP69	SLP70							
SLP70			SLP70	SLP71							
SLP71			SLP71	SLP72							
SLP72			SLP72	SLP73							
SLP73			SLP73	SLP74							
SLP74			SLP74	SLP75							
SLP75			SLP75	SLP76							
SLP76			SLP76	SLP77							
SLP77			SLP77	SLP78							
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SLP79			SLP79	SLP80							
SLP80			SLP80	SLP81							
SLP81			SLP81	SLP82							
SLP82			SLP82	SLP83							
SLP83			SLP83	SLP84							
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SLP85			SLP85	SLP86							
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SLP87			SLP87	SLP88							
SLP88			SLP88	SLP89							
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SLP90			SLP90	SLP91							
SLP91			SLP91	SLP92							
SLP92			SLP92	SLP93							
SLP93			SLP93	SLP94							
SLP94			SLP94	SLP95							
SLP95			SLP95	SLP96							
SLP96			SLP96	SLP97							
SLP97			SLP97	SLP98							
SLP98			SLP98	SLP99							
SLP99			SLP99	SLP100							

PROCEDURE TYPE REV# \*CALLED \*CALLING \*FD-NAME COMP CRR CONF HRR CONF VCN CONF TYPE CONF SUBTYPE

PROCEDURE	TYPE	REV#	*CALLED	*CALLING	*FD-NAME	COMP	CRR	CONF	HRR	CONF	VCN	CONF	TYPE	CONF	SUBTYPE
SLPD0	GOAL	47		SLPB3											
SLPED	GOAL	31		SLPB3											
SLPFO	GOAL	42		SLPB3											
SLPG1	GOAL	10		SLPA1											
				SLPA0											
SLPG2	GOAL	86		SLP50											
				SGP02											
SLPG0	GOAL	43		SLPB3											
SLPH0	GOAL	58		SLPB3											
SLPJO	GOAL	42		SGPU2											
SLPK0	GOAL	26		XYP50											
				SLPB2											
SLPLO	GOAL	58		SLPC3											
SLPM1	GOAL	54	SLPM2	XYP50											
				SGPR2											
SLPM2	GOAL	22		SLPD5											
SLPP1	GOAL	33	SSPD4	SLPM1											
			SLPD5												
			SLPD2												
			SLPC3												
			SLPC2												
			SLPB3												
			SLPB2												
			SLP50												
			SLP08												
			SLP07												
			SDP05												
			SAP91												
			SAP90												
SLPP2	GOAL	32	SSPD4												
			SLPD5												
			SLPD2												
			SLPC3												
			SLPC2												
			SLPB3												
			SLPB2												
			SLP50												
			SLP08												
			SLP07												
			SDP05												
			SAP91												
			SAP90												
SLPX0	GOAL	44		SLPC3											
SLPY1	GOAL	56		SLPC3											
SLPY2	GOAL	60		SLPC3											
SLPY0	GOAL	55		SLPC3											
SSPD1	GOAL	120		SLP07											
				SGPW2											

PROCEDURE	TYPE	REV#	*CALLED	*CALLING	*FD-NAME	COMP CRR	CONF CRR	HRR	CONF VCN	CONF TYPE	CONF SUBTYPE
				SGPV2							
				SGPS2							
				SGP02							
				SGPU2							
				SGPT2							
SSPD4	GOAL	75	SOP11	SLPR2							
				SLPR1							
				SLP03							
				SLP02							
				SLP01							
SSPS1	GOAL	59		SLP26							
				SGPU2							
				SGPT2							
SSPZ1	GOAL	93		SLP50							
				SEP11							
				SLPC3							
				SLPB2							
				SLPB3							

\*\*\*\*\* REPORT LISTING COMPLETED \*\*\*\*\*

## GLS RUMs AND DESCRIPTION

SAP90 Manual Selection of GOAL On-board LS Commands  
SAP91 Manual Selection of LDB-FEP Safing Sequence Loading  
SEPT1 GLS Event Status Monitor  
SGP02 GLS Mainline Linker LCD  
SGPR2 GLS Mainline Number 1 LCD T-26 thru T-9 autohold  
SGPS2 GLS Mainline Number 2 LCD T-9:00 thru T-5:15  
SGPT2 GLS Mainline Number 3 LCD T-5:15 thru T-3:30  
SGPU2 GLS Mainline Number 4 LCD T-3:30 thru T-2:35  
SGPV2 GLS Mainline Number 5 LCD T-2:35 thru T-1:00  
SGPW2 GLS Mainline Number 6 LCD T-1:00 thru T-0:26

Note: SLP26 takes over from T-26 sec past post liftoff safing

SLP01 GLS Display Schedule Pad  
SLP02 LCC Display Schedule Pad  
SLP03 System Display Schedule Pad  
SLP07 GLS Control and Display  
SLP08 Bypass Select - Bypass Mainline Sequence, Single Shot VFY,  
and ML Func BYP/CHG  
SLP10 LCD Limit Change - BHYD  
SLP11 LCD Limit Change - HYD  
SLP12 LCD Limit Change - APU  
SLP13 LCD Limit Change - FCL  
SLP14 LCD Limit Change - No FD Program, INTG/CENT Limit Change  
SLP17 LCD Limit Change - SSME  
SLP18 LCD Limit Change - GNS  
SLP19 LCD Limit Change - DPS  
SLP20 LCD Limit Change - WATER





SLP21 LCD Limit Change - BPYRO  
SLP22 LCD Limit Change - BELEC  
SLP24 LCD Limit Change - BINST  
SLP25 LCD Limit Change - INSTR  
SLP26 GLS Mainline Module 7 LCD T-26 sec to T-0 and Post Liftoff Safing  
SLP27 LCD Limit Change - ECLSS  
SLP29 LCD Limit Change - ARMS  
SLP30 LCD Limit Change - MPS  
SLP31 LCD Limit Change - FCP  
SLP32 LCD Limit Change - BRS  
SLP33 LCD Limit Change - TRS  
SLP34 LCD Limit Change - EPDC  
SLP35 LCD Limit Change - PVD  
SLP37 LCD Limit Change - NAVAID  
SLP39 Mainline 25 Display - Tables 0-4  
SLP40 Mainline 25 Display - Tables 5-7  
SLP41 Mainline 25 Display - Tables 8-15  
SLP44 LCC 10 Display Tables - 9-11  
SLP45 Mainline 10 Display Tables - 10-13  
SLP46 Pretest Mask Requirements-1 - Useless  
SLP50 Control Logic RSYS  
SLP7A LCC 10 Display - Tables 0-2  
SLP7B LCC 10 Display - Tables 3-4  
SLP7C LCC 10 Display - Tables 5-6  
SLP7D LCC 10 Display - Tables 7-8  
SLP7E LCD Limit Change FCL2  
SLP9K Console Failure RSYS Transfer



SLPA1 Mainline Interrupts - Table 8 thru 15  
 SLPA0 Mainline Interrupts - Table 0 thru 7  
 SLPB2 LCC Control and Display  
 SLPB3 LCC Lookup Schedule  
 SLPB0 LCC Interrupt Processor 1  
 SLPC2 Interrupt Voting Logic View  
 SLPC3 Interrupt Lookup Schedule  
 SLPC0 LCC Interrupt Processor 2  
 SLPD2 Mainline Functional Bypass/Change  
 SLPD3 GLS Sequence Validity Check #1  
 SLPD4 GLS Sequence Validity Check #2  
 SLPD5 Pre Seq Functional Bypass Selection  
 SLPD6 Page Display for Single Shot FD's for Masking  
 SLPDO LCC 25 Display - Tables 0-2  
 SLPE0 LCC 25 Display - Tables 3-4  
 SLPFO LCC 25 Display - Tables 5-6  
 SLPG1 OAA Reconfigure and Hydraulic Recharge  
 SLPG2 GLS Breakout Safing  
 SLPG0 LCC 25 Display - Tables 7-8  
 SLPH0 LCC 25 Display - Tables 9-11  
 SLPJ0 G02 Vent Arm Retract  
 SLPK0 LCD Limit Change COMM  
 SLPL0 View Verify Failure 2  
 SLPM1 LCC Single Shot Verify Check #1  
 SLPM2 LCC Single Shot Verify Check #2  
 SLPP1 GLS-2 Display Schedule Pad  
 SLPP2 LCC-2 Display Schedule Pad



SLPX0 View Verify Failure 1  
SLPY1 Mainline 10 Display - Tables 5-6  
SLPY2 Mainline 10 Display - Tables 7-9  
SLPY0 Mainline 10 Display - Tables 0-4  
SSPD1 GLS Hold Management  
SSPD4 GLS Pseudo Housekeeping Program  
SSPS1 GLS Aerosurface, MPS and SRB Actuators  
SSPZ1 GLS Header Maintenance



PSUEDO FUNCTION DESIGNATOR CONTROL DOCUMENT

08/28/84  
CCMS REV 90693

FD NAME	NOMENCLATURE	TYPE	ODIS	RSYS	OWN BY	SET BY	USE BY	LOC	SIG	AUTH
NO11VUS3E	CURRENT LDB GPC MEMORY CONFIGURATION TO THE LDB	PDP	65WDPS	CIITEM	DPS	DPS	DPS	B	B	

NOTE: UNDER EVALUATION AT KSC  
DESC: IDENTIFIES THE CURRENT GPC MEMORY CONFIGURATION TO THE LDB  
REP. 0 = OPS 0

- 1 = GNC 1
- 2 = GNC 2
- 3 = GNC 3
- 4 = SM2
- 6 = PL9
- 7 = SM9
- 3 = GNC 8
- 9 = GNC 9

FD NAME	NOMENCLATURE	TYPE	ODIS	RSYS	OWN BY	SET BY	USE BY	LOC	SIG	AUTH
NO11VUS3E	ECLSS STATIONKEEPING ENGAGE PSEUDO	PD	ECLSS	ECLSS	ECLSS	ECLSS	ECLSS	K	K	A:CSCB10-10/1

DESC: NO11VUS3E - ECLSS STATIONKEEPING ENGAGE PSEUDO. SET TO ON WHEN STATIONKEEPING IS BEING CONDUCTED FROM THE INTEGRATION CONSOLE. SET TO OFF WHEN BEING CONDUCTED FROM THE ECLSS CONSOLE.

FD NAME	NOMENCLATURE	TYPE	ODIS	RSYS	OWN BY	SET BY	USE BY	LOC	SIG	AUTH
NR1VU02E	ECL EMON RSYS AT INT BU MSTR CNSL	PD	INTEG	INTEG	ECLSS	INTEG	MASTER	K	K	:7-20/03

DESC: INDICATES LOCATION OF RSYS

FD NAME	NOMENCLATURE	TYPE	ODIS	RSYS	OWN BY	SET BY	USE BY	LOC	SIG	AUTH
NZ01B001E	BERD SRB S/K ACTIVE	PD	BELEC	BELEC	EPDC	EPDC	INIG	B	B	C:BASE5

DESC: THIS PSEUDO IS REQUIRED TO PROVIDE STATUS NOTIFICATION TO INTEGRATION CONSOLE. THE NATURE OF STATUS IS TO INFORM THE INTEGRATION CONSOLE THAT THEY ARE REQUIRED TO PERFORM STATIONKEEPING FUNCTIONS FOR CONSOLE C10.

FD NAME	NOMENCLATURE	TYPE	ODIS	RSYS	OWN BY	SET BY	USE BY	LOC	SIG	AUTH
DITCRIT10	CRITICAL FUNCTION 10	PD	OSWIVT	INTEG	GNC	INTEG	INIG	K	K	C:BASE5

NOTE: UNDER EVALUATION AT KSC  
DESC: THE DIT IS CAPABLE OF MONITORING UP TO 16 CRITICAL FUNCTIONS DITCRIT1 THRU DITCRIT16 AS SPECIFIED BY A DIGITAL PATTERN DITCRITSEL. THE DIT WILL SUBSEQUENTLY MONITOR DITCRIT1 THROUGH DITCRIT16 AND INDICATE THEIR RELATIVE TIME OF OCCURRENCE VIA THE DIT MONITOR PROGRAM. THEIR RELATIVE TIME OF OCCURRENCE IS COMPARED TO THE APPROPRIATE TIME LIMITS SPECIFIED BY PARAMETER 50 THROUGH 65.

FD NAME	NOMENCLATURE	TYPE	ODIS	RSYS	OWN BY	SET BY	USE BY	LOC	SIG	AUTH
NU10GNCR	GNC APPLICATION SET SEND COMM	COM	FC-A	FC-A	GNC	GNC	GNC	B	B	:BASELINE

DESC: INTRA-CONSOLE COMMUNICATION INTERRUPT FROM MUT CONCURRENTLY TO MUT CONCURRENTLY PER 80K00027/CCMS APPLICATION SOFTWARE STANDARD

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FD NAME Nomenclature TYPE ODIS RSYS OWN BY SET BY USE BY LOC SIG AUTH

DII PRINI DII PRINI PD GSWINI INTEG INIG INIG K K :  
NOTE: UNDER EVALUATION AT KSC  
DESC: USED TO REQUEST ALL SUCCESSFUL MESSAGES TO BE OUTPUTTED.

DII STATUS DII PHASE STATUS PDP GSWINI INTEG INIG INIG K K :  
NOTE: UNDER EVALUATION AT KSC  
DESC: PSEUDO DIGITAL PATTERN (16 BITS)  
THE CURRENT "VALUE" OF DII STATUS IS UPDATED AND MAINTAINED BY THE LPS DII CONTROL PROGRAM (EXECUTING IN THE SPA SUBSYSTEM) PRIMARILY TO COMMUNICATE STATUS AND COMBINED SENSOR SELECTIONS TO THE CCMS CONSOLE TRANSIENT DII MONITOR (DII MON) FOR SUBSEQUENT DISPLAY.

DII TYPE DII SCENARIO TYPE PDP GSWINT INTEG INIG INIG K K :  
NOTE: UNDER EVALUATION AT KSC  
DESC: PSEUDO DIGITAL PATTERN  
UPDATED AND MAINTAINED BY THE DII UPDATED AND MAINTAINED BY THE DII CONTROL PROGRAM, DII TYPE DEFINES THE DII SCENARIO CURRENTLY UNDER SIMULATION.

DII VARELAG DII VARIABLE START TIME INDICATOR PD GSWVE INTEG INIG INIG K K :BASELINE  
NOTE: UNDER EVALUATION AT KSC  
DESC: MUST BE SET TO AN "ON" STATE TO INFORM THE DII CONTROL PROGRAM THAT A USER DEFINED GMT OF TO EITHER HAS, OR WILL BE, DEFINED.

DII VARTIME DII VARIABLE START TIME PA GSWVE INTEG INIG INIG K K :  
NOTE: UNDER EVALUATION AT KSC  
DESC: INTEGRAL 32-BIT INTEGER SECONDS TIME OF YEAR (STOY) WHICH DEFINES THE REVISED GMT OF TO.

NUJ1INTEG MODIFY SEM 1 COM INTEG INIG INIG K K :  
DESC: REMOTE COM USED TO TERMINATE SEMS.

NUJ2INTEG MODIFY SEM 2 COM INTEG INIG INIG K K :BASELINE  
DESC: REMOTE COM USED TO TERMINATE MIPS.

NUJ3INTEG CHANGE PROGRAM COM INTEG INIG INIG K K :BASELINE  
DESC: REMOTE COM ML FAILURE HAS OCCURRED READ PSEUDO NUJ1S272 - 2750.

NUJ4INIGR GO FOR LH2 REPLENISH TERM COM INIG INIG K K :BASELINE  
DESC: REMOTE COM CMD SENT TO LH2 CONSOLE TO INITIATE LH2 REPLENISH TERM.



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N005INTGR	GO FOR EI LOX PRESSURIZATION DESC: REMOTE COM CMD SENT TO LOX TO INITIATE LOX PRESSURIZATION.	COM	INTEG		INIG	INIG	INIG	B	B	C:BASES
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N006INTGR	PERFORM SLPG1 DESC: REMOTE COM	COM	INTEG		INIG	INIG	INIG	K	K	
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N007INTGR	GO FOR TERM LOX RELINISH DESC: REMOTE COM CMD SENT TO LO2 CONSOLE TO TERM LOX REPLENISH.	COM	INTEG		INIG	INIG	INIG	B	B	C:BASES
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N008INTGR	BREAKOUT DESC: REMOTE COM BREAKOUT REM-COM INTERRUPT TO BEGIN SAFING. SIGNAL AND EXIT FROM MAINLINE SEQUENCE.	COM	INTEG		INIG	INIG	INIG	K	K	:BASELINE
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N009INTGR	PERFORM CDBFR MAINT DESC: REMOTE COM GO TO SEND TERM LOX REPLN TO LO2.	COM	INTEG		INIG	INIG	INIG	K	K	:BASELINE
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N010INTGR	SEND RESPONSE TO REMOTE PROMPT DESC: SIGNAL TO THE SYSTEM SCHEDULAR FROM THE FULL TIME SEQUENCER THAT RESPONSE DATA IN THE SYS.MGI CONCURRENCY REQUEST PD SHOULD BE MERGED WITH EXTERNAL PROMPT MAILBOX STORED IN A DISK FILE, AND RETURNED TO IHL PROMPT ORIGINATOR.	COM	INTEG		INIG	INIG	INIG	K	K	:12-20/1
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N011INTGR	SYSTEMS BREAKOUT DESC: REMOTE COM NOTIFY SYSTEMS OF BREAKOUT.	COM	INTEG		INIG	INIG	INIG	B	B	C:BASES
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N012INTGR	SYSTEMS IN FD CONTROL NOTE: ACCESSORIES INTERFACE AT VLS ONLY DESC: REMOTE COM NOTIFY SYSTEMS RSYS XFER.	COM	INTEG		INIG	INIG	INIG	B	B	C:BASES
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N013INTGR	SAFING COMPLETE NOTE: VFDS AND ACC INTERFACE USED AT VLS ONLY DESC: REMOTE COM NOTIFY SYSTEMS OF SAFING STATUS.	COM	INTEG		INIG	INIG	INIG	B	B	C:BASES
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N014INTGR	LIFT OFF DESC: REMOTE COM NOTIFY SYSTEMS OF LIFT - OFF.	COM	INTEG		INIG	INIG	INIG	B	B	C:BASES
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N015INTGR	LCC VOTING LOGIC FAILURE DESC: REMOTE COM CAUSE THE FAILURE DISPLAY PROGRAM TO READ BITS. USED IN AUTO-LOOKUP OF VOTING LOGIC FAILURES.	COM	INTEG		INTG	INTG	INTG	K	K	:BASELINE
N016INTGR	MAINLINE INTERRUPT FAILURE DESC: REMOTE COM CAUSE THE FAILURE DISPLAY PROGRAM TO READ BITS. USED IN AUTO-LOOKUP OF VOTING LOGIC FAILURES.	COM	INTEG		INTG	INTG	INTG	K	K	:BASELINE
N017INTGR	MAINLINE INTERRUPT VL FAILURE DESC: REMOTE COM CAUSE THE FAILURE DISPLAY PROGRAM TO READ BITS. USED IN AUTO-LOOKUP OF VOTING LOGIC FAILURES.	COM	INTEG		INTG	INTG	INTG	K	K	:BASELINE
N018INTGR	LCC MASK DESC: REMOTE COM CAUSE THE FAILURE DISPLAY PROGRAM TO READ BITS.	COM	INTEG		INTG	INTG	INTG	K	K	:BASELINE
N019INTGR	MAINLINE INTERRUPT MASK DESC: REMOTE COM CAUSE THE FAILURE DISPLAY TO READ BITS.	COM	INTEG		INTG	INTG	INTG	K		C:BASES
N020INTGR	START ONE-SHOT DATA TRANSFER DESC: REM COM SENT BY GLS TO DPS TO START ONE-SHOT DATA TRANSFER.	COM	INTEG		INTG	INTG	INTG	B	H	C:BASES
N021INTGR	ONE-SHOT DATA TRANSFER COMPLETE DESC: REMOTE COM SENT BY DPS TO LET GLS KNOW ONE-SHOT COMPLETE.	COM	INTEG		INTG	DPS	INTG	B	B	C:BASES
N022INTGR	START OPS TRANSITION DESC: REMOTE COM SENT BY SGP02 TO SEND TO DPS TO START OPS TRANSITION.	COM	INTEG		INTG	INTG	INTG	B	B	C:BASES
N023INTGR	OPS TRANSITION COMPLETE DESC: REMOTE COM SENT BY DPS TO LET GLS KNOW OPS TRANSITION COMPLETE.	COM	INTEG		INTG	DPS	INTG	B	B	C:BASES
N024INTGR	START GPC DUMP AND COMPARE DESC: SENT TO DPS TO START GPC DUMP & COMPARE.	COM	INTEG		INTG	INTG	INTG	B	B	C:BASES
N025INTGR	GPC DUMP AND COMPARE COMPLETE DESC: REMOTE COM SENT BY DPS TO LET GLS KNOW GPC DUMP AND COMPLETE.	COM	INTEG		INTG	DPS	INTG	B	B	C:BASES
N026INTGR	EPDC/INTEG COMM INTERRUPT DESC: POWER UP/DOWN REMOTE COMMUNICATION INTERRUPT BETWEEN EPDC/INTEG - REMOTE COM	COM	INTEG		INTG	INTG	INTG	B	B	C:BASES

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N027INTGR ECLSS/INTG COMM INTERRUPT COM INTG INTG INTG B B C:BASES  
DESC: POWER UP/DOWN REMOTE COMMUNICATION INTERRUPT BETWEEN ECLSS/INTG

N028INTGR INST/INTG COMM INTERRUPT COM INTG INTG INTG B B C:BASES  
DESC: POWER UP/DOWN REMOTE COMMUNICATION INTERRUPT BETWEEN INST/INTG

N029INTGR DPS/INTG COMM INTERRUPT COM INTG INTG INTG B B C:BASES  
DESC: POWER UP/DOWN REMOTE COMMUNICATION INTERRUPT BETWEEN DPS/INTG

N029INTGR HOLD AVBL UPDATE COM INTG INTG INTG K K :BASELINE  
DESC: HOLD AVAILABLE UPDATE

N030INTGR MASTER/INTG COMM INTERRUPT COM INTG INTG INTG K K :  
DESC: POWER UP/DOWN REMOTE COMMUNICATION INTERRUPT BETWEEN MSTR/INTG

N031INTGR ET/INTG COMM INTERRUPT COM INTG INTG INTG B B C:BASES  
DESC: POWER UP/DOWN REMOTE COMMUNICATION INTERRUPT BETWEEN ETINST/INTG

N032INTGR EPDC/INTG EMERG INTERRUPT COM INTG INTG INTG B B C:BASES  
DESC: EPDC/INTG EMERGENCY INTERRUPT

N033INTGR ECLSS/INTG EMERG INTERRUPT COM INTG INTG INTG B B C:BASES  
DESC: ECLSS/INTG EMERGENCY INTERRUPT

N034INTGR INST/INTG EMERG INTERRUPT COM INTG INTG INTG B B C:BASES  
DESC: INST/INTG EMERGENCY INTERRUPT

N035INTGR DPS/INTG EMERG INTERRUPT COM INTG INTG INTG B B C:BASES  
DESC: DPS/INTG EMERGENCY INTERRUPT

N036INTGR MASTER/INTG EMERG INTERRUPT COM INTG INTG INTG K K :BASELINE  
DESC: MASTER/INTG EMERGENCY INTERRUPT

N037INTGR ET/INTG EMERG INTERRUPT COM INTG INTG INTG B B C:BASES  
DESC: ET/INTG EMERGENCY INTERRUPT

N038INTGR INTEG COMM INTERRUPT 1 COM INTG INTG INTG K K :  
DESC: POWER UP/DOWN REMOTE COMMUNICATION INTERRUPT FROM INTEG'S CONC 1 TO CONC 2.

N039INTGR GPC I/O ERROR COMMUNICATION COM INTG INTG INTG B B C:BASES  
DESC: REM COM SENT BY DPS TO GLS UPON A GPC I/O ERROR DETECTED.

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N031S001A GNC SUMMING PA INTEG INIEG INTG INIEG INTG K K :  
 DESC: SJMS AEROSURFACE & CMPS FD'S AFTER PROFILES & GIMBAL CHECKS.

N031S001D MASK ROW 1 PDP INTEG INIEG INTG INTG K K :  
 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.

N031S001E SEM 1 ACTIVE PD INIEG INIEG INTG INTG K K :  
 DESC: INDICATES STATUS OF SEM'S.

N031S002A INTEG NEXT REPEAT TIME PA INTEG INIEG INTG INTG K K :  
 DESC: NEXT TIME (J10Y) AT WHICH THE NEXT REPEATING  
 FUNCTION IS TO BE RUN (REF. STRUCTURE STANDARD  
 82K0027).

N031S002D MASK ROW 2 PDP INTEG INIEG INTG INTG K K :  
 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.

N031S002E SEM 2 ACTIVE PD INTEG INIEG INTG INTG K K :  
 DESC: INDICATES STATUS OF SEM'S.

N031S003A SEQUENCE LIMIT CHANGE 1 PA INIEG INIEG INTG INTG K K :  
 DESC: INDICATES LOW AND HIGH LIMIT OF THE NEXT ML ANALOG  
 SEQUENCE TO BE CHANGED.

N031S003D MASK ROW 3 PDP INIEG INIEG INTG INTG K K :  
 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.

N031S003E LCC HOLD PD INTEG INIEG INTG INTG K K :  
 DESC: EMON-OVERRIDE TO KEEP FROM SAFING.

N031S004A SEQUENCE LIMIT CHANGE 2 PA INIEG INIEG INTG INTG K K :  
 DESC: INDICATES LOW AND HIGH LIMIT OF THE NEXT ML ANALOG  
 SEQUENCE TO BE CHANGED.

N031S004D MASK ROW 4 PDP INTEG INIEG INTG INTG K K :  
 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.

N031S004E SYSTEMS IN CONTROL FLAG PD INTEG INIEG INTG INTG K K :  
 DESC: INDICATES SAFING COMPLETE.

N031S005A SEQUENCE CHANGE PA INTEG INIEG INTG INTG K K :  
 DESC: INDICATES LOW & HIGH LIMIT OF THE NEXT ML ANALOG SEQ TO BE  
 CHANGED.

N031S005D MASK ROW 5 PDP INTEG INIEG INTG INTG K K :  
 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.

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FD NAME	NOMENCLATURE	TYPE	ODIS	RSYS	OWN BY	SET BY	USE BY	LOC SIG	AUTH
N0315005L	GLS LIMITS AND CONTROL TO GLS DESC: SHOWS WHEN GLS LIMITS AND FD CCM SET.	PD	INTEG	INTEG	INTEG	INTEG	INTEG	K	BASELINE
N0315006A	BREAKOUT TIME DESC: GMT TIME SET TO THE TIME OF EXISTING FROM A HOLD.	PA	INTEG	INTEG	INTEG	INTEG	INTEG	K	K
N0315006B	MASK ROW 6 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K
N0315006E	LH2 REPLINISH TERM IN PROGRESS DESC: SET BY LH2 - VERIFIED BY ML - RECORDED BY SLPLO.	PD	INTEG	INTEG	INTEG	INTEG	INTEG	B	B C:BASES
N0315007A	HOLD AVAILABLE DESC: TOTAL HOLD TIME AVAILABLE.	PA	INTEG	INTEG	INTEG	INTEG	INTEG	K	BASELINE
N0315007D	MASK ROW 7 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K
N0315007E	LH2 FLIGHT MASS DESC: SET BY LH2 - VERIFIED BY ML - RECORDED BY SLPLO.	PD	INTEG	INTEG	INTEG	INTEG	INTEG	H	B C:BASES
N0315008A	RESUME TIME DESC: GMT TIME THAT SSPD1 WILL RESUME FROM A HOLD.	PA	INTEG	INTEG	INTEG	INTEG	INTEG	K	K
N0315008D	MASK ROW 8 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K
N0315008E	LOX FLIGHT MASS DESC: SET BY LO2 - VERIFIED BY ML - RECORDED BY SLPXO.	PD	INTEG	INTEG	INTEG	INTEG	INTEG	B	B C:BASES
N0315009A	GMT LO DESC: USED TO DETERMINE GMT LIFT OFF TIME FOR THE VEHICLE.	PA	INTEG	INTEG	INTEG	INTEG	INTEG	K	K
N0315009D	MASK ROW 9 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K
N0315009E	ET LOX PRESSURIZATION IN PROGRESS DESC: SET BY LO2 - VERIFIED BY ML - RECORDED BY SLPXO.	PD	INTEG	INTEG	INTEG	INTEG	INTEG	B	B C:BASES
N0315010A	DELTA TIME NUM DESC: ACTUAL TIME SLIP OF ML.	PA	INTEG	INTEG	INTEG	INTEG	INTEG	K	K
N0315010D	MASK ROW 10 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K

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R031S010E LOX REPL TERMINATION IN PROGRESS PD INIEG INTG INTG INTG B B C:BASES  
DESC: SET BY L02 - VERIFIED BY ML - RECORDED BY SLPLO.

R031S011A DELTA TIME DENOM PA INTEG INIEG INTG INTG INTG K K :  
DESC: ALLOWABLE SLIP FROM ML.

R031S011D MASK ROW 11 PDP INIEG INTG INTG INTG K K :  
DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.

R031S011E HOLDING PD INTEG INIEG INTG INTG INTG B B C:BASES  
NOTE: ACC AND VFDS INTERFACE USED AT VLS ONLY  
DESC: ON/OFF FLAG TO INDICATE THAT CDC IS HOLDING.

R031S012A HOLD AT PA INTEG INIEG INTG INTG INTG K K C:BASES  
DESC: HOLD AT TIME

R031S012D MASK ROW 12 PDP INTEG INIEG INTG INTG INTG K K :  
DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.

R031S012E RESUME NOW PD INTEG INIEG INTG INTG INTG K K :BASELINE  
DESC: ON/OFF INDICATOR TO SHOW TO RESUME FROM A HOLD.

R031S013A TIME TO MILESTONE PA INTEG INIEG INTG INTG INTG K K :BASELINE  
DESC: TIME TO MILESTONE

R031S013D MASK ROW 13 PDP INTEG INIEG INTG INTG INTG K K :  
DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.

R031S013E BREAKDWT FLAG PD INTEG INIEG INTG INTG INTG K K :BASELINE  
DESC: USED TO TRIGGER AN EXIT FROM THE MAINLINE.

R031S014D MASK ROW 14 PDP INTEG INIEG INTG INTG INTG K K :  
DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.

R031S014E CDBFR MAINTAINENCE INDICATOR PD INTEG INIEG INTG INTG INTG K K :BASELINE  
DESC: PREVENTS SLPD2 FROM BEING ACCESSED BY MORE THAN ONE PROGRAM AT A TIME SO THE DISK FILES ARE PROPERLY UPDATED.

R031S015D MASK ROW 15 PDP INTEG INIEG INTG INTG INTG K K :  
DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.

R031S015E GLSML ACTIVE INDICATOR PD INTEG INIEG INTG INTG INTG K K :BASELINE  
DESC: SIGNIFY MAINLINE IS ACTIVE.

R031S016D MASK ROW 16 PDP INTEG INIEG INTG INTG INTG K K :  
DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.

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N0315016E	ONE SHOT DATA ACKNOWLEDGE DESC: ACKNOWLEDGE ONE SHOT DATA.	PD	INIEG	IAIEG	INIG	INIG	INIG	B	B	C:BASES
N0315017D	MASK ROW 17 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	:
N0315017E	OPS 101 TRANS. ACKNOWLEDGE DESC: ACKNOWLEDGE OPS 101 TRANSITION.	PD	INIEG	IAIEG	INIG	INIG	INIG	B	B	C:BASES
N0315018D	MASK ROW 18 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	:
N0315018E	GPC DUMP COMP. ACKNOWLEDGE DESC: ACKNOWLEDGE GPC DUMP AND COMPARE.	PD	INIEG	IGIEG	INIG	INIG	INIG	B	B	C:BASES
N0315019D	MASK ROW 19 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	:
N0315019L	SRU-AFI MDM FAIL DESC: SIGNIFY SRB AFI MDM FAILURE.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:BASELINE
N0315020D	MASK ROW 20 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	:
N0315020E	GO FOR I-9 GLS SEQUENCE DESC: MAINLINE VERIFY I-9 MILESTONE.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:BASELINE
N0315021D	MASK ROW 21 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	:
N0315021E	OAA REIRALI MILESTONE DESC: MAINLINE VERIFY OAA MILESTONE.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:BASELINE
N0315022D	MASK ROW 22 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	:
N0315022E	ORBITER APU START MILESTONE DESC: MAINLINE VERIFY APU MILESTONE.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:BASELINE
N0315023D	MASK ROW 23 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	:
N0315023E	PURGE SEQUENCE 4 MILESTONE DESC: MAINLINE VERIFY PURGE SEQUENCE 4 MILESTONE.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:BASELINE
N0315024D	MASK ROW 24 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	:

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N03150241	E1 L02 PRESSURIZING MILESTONE DESC: MAINLINE VERIFY ET L02 PREPRESS MILESTONE.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:BASELINE
N03150250	MASK ROW 25 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	:
N03150251	I1 LH2 PRESSURIZING MILESTONE DESC: MAINLINE VERIFY ET LH2 PREPRESS MILESTONE.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:BASELINE
N03150260	MASK ROW 26 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	:
N03150261	G0 FOR AUTO SEQ START MILESTONE DESC: MAINLINE VERIFY AUTO SEQUENCE START MILESTONE.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:BASELINE
N03150270	MASK ROW 27 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	:
N03150271	G0 FOR S&A ARMING MILESTONE DESC: MAINLINE VFY MILESTONE.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:BASELINE
N03150280	MASK ROW 28 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	:
N03150281	START SOUND SUPPRESS W/R MILESTONE DESC: MAINLINE VFY MILESTONE.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:
N03150290	MASK ROW 29 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	:
N03150291	G0 FOR MAIN ENG START MILESTONE DESC: MAINLINE VERIFY MAIN ENGINE START MILESTONE.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:BASELINE
N03150300	MASK ROW 30 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	:
N03150301	SRB IGNITION MILESTONE DESC: MAINLINE VERIFY SRB IGNITION MILESTONE.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:BASELINE
N03150310	MASK ROW 31 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	:
N03150311	RSYS CHANGE ACTIVE DESC: DEMAND UPDATE.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:BASELINE
N03150320	MASK ROW 32 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	:



PSUEDO FUNCTION DESIGNATION CONTROL DOCUMENT

08/28/84  
CCMS REV 90893

PD NAME	NOMENCLATURE	TYPE	ODIS	RSYS	OWN BY	SET BY	USE BY	LOC	SIG	AUTH
N0315032E	LCC-1 MILESTONE DESC: LCC-1 EFFECTIVITY MILESTONE.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:BASELINE
N0315033D	MASK ROW 33 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	:
N0315033E	LCC-2 MILESTONE DESC: LCC-2 EFFECTIVITY MILESTONE.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:BASELINE
N0315034D	MASK ROW 34 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	:
N0315034E	LCC-3 MILESTONE DESC: LCC-3 EFFECTIVITY MILESTONE.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:BASELINE
N0315035D	MASK ROW 35 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	:
N0315035E	LCC-4 MILESTONE DESC: LCC-4 EFFECTIVITY MILESTONE.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:BASELINE
N0315036D	MASK ROW 36 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	:
N0315036E	CVFY G4 FOR T-9MS DESC: ML INTERRUPT T-9M MILESTONE CHECKED BY ML.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:BASELINE
N0315037D	MASK ROW 37 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	:
N0315037E	CVFY OAA REIRACT MS DESC: ML INTERRUPT OAA MILESTONE CHECKED BY ML.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:BASELINE
N0315038D	MASK ROW 38 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	:
N0315038E	CVFY ORBIER APU SIARI MS DESC: ML INTERRUPT APU MILESTONE CHECKED BY ML.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:BASELINE
N0315039D	MASK ROW 39 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	:
N0315039E	CVFY PURGE SEQUENCE 4 MS DESC: ML INTERRUPT PURGE SEQUENCE 4 MILESTONE CHECKED BY ML.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:BASELINE
N0315040D	MASK ROW 40 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	:

PSUEDO FUNCTION DESIGNATOR CONTROL DOCUMENT

08/26/84

CCMS REV 90893

FD NAME	NOMENCLATURE	TYPE	ODIS	RSYS	OWN BY	SET BY	USE BY	LOC	SIG	AUTH
N031S040E	CVFY ET LH2 PRESSURIZE MS DESC: ML INTERRUPT ET LH2 PREPRESS MILESTONE CHECKED BY ML.	PD	INIEG	INIEG	INIG	INIG	INTG	K	K	:BASELINE
N031S041D	MASK ROW 41 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INTG	K	K	:
N031S041E	CVFY ET LH2 PRESSURIZE MS DESC: ML INTERRUPT ET LH2 PREPRESS MILESTONE CHECKED BY ML.	PD	INIEG	INIEG	INIG	INIG	INTG	K	K	:BASELINE
N031S042D	MASK ROW 42 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INTG	K	K	:
N031S042E	CVFY GO FOR AUTO SEQ. START MS DESC: ML INTERRUPT AUTO SEQUENCE START MILESTONE CHECKED BY ML.	PD	INIEG	INIEG	INIG	INIG	INTG	K	K	:BASELINE
N031S043D	MASK ROW 43 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INTG	K	K	:
N031S043E	CVFY GO FOR S&A ARMING MS DESC: ML INTERRUPT MILESTONE CHECKED BY ML.	PD	INIEG	INIEG	INIG	INIG	INTG	K	K	:BASELINE
N031S044D	MASK ROW 44 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INTG	K	K	:
N031S044E	CVFY START SOUND SUPPRESS WAIVER MS DESC: ML INTERRUPT MILESTONE CHECKED BY ML.	PD	INIEG	INIEG	INIG	INIG	INTG	K	K	:
N031S045D	MASK ROW 45 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INTG	K	K	:
N031S045E	CVFY GO FOR MAIN ENG START MS DESC: ML INTERRUPT MAIN ENGINE START MILESTONE CHECKED BY ML.	PD	INIEG	INIEG	INIG	INIG	INTG	K	K	:BASELINE
N031S046D	MASK ROW 46 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INTG	K	K	:
N031S046E	CVFY SRB IGNITION MS DESC: ML INTERRUPT SRB IGNITION MILESTONE CHECKED BY ML.	PD	INIEG	INIEG	INIG	INIG	INTG	K	K	:BASELINE
N031S047D	MASK ROW 47 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INTG	K	K	:
N031S047E	HOLD MANAGEMENT ACTIVE DESC: SIGNIFIES HOLD MANAGEMENT ACTIVE.	PD	INIEG	INIEG	INIG	INIG	INTG	K	K	:BASELINE
N031S048D	MASK ROW 48 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INTG	K	K	:

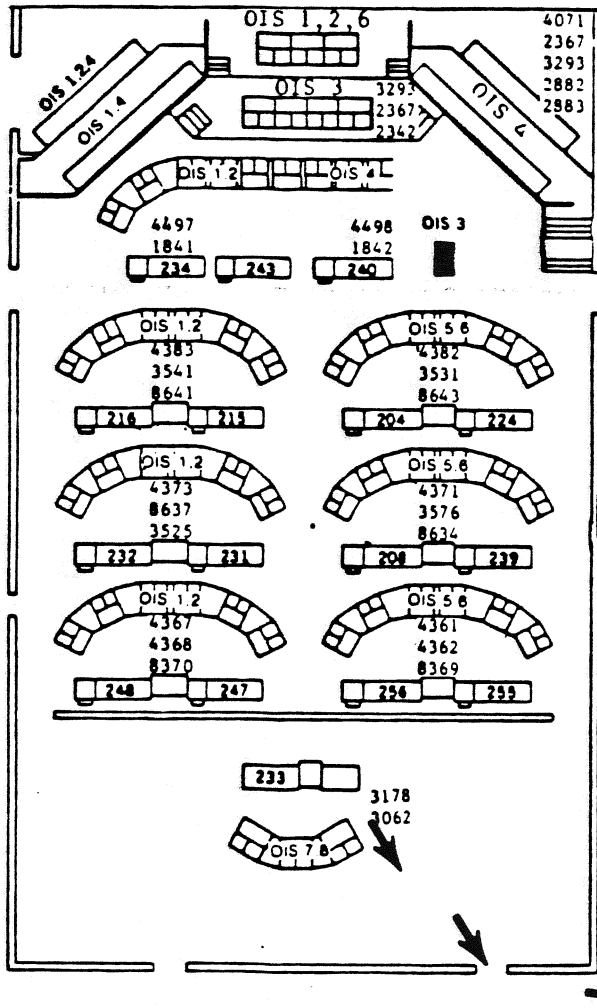
PSUEDO FUNCTION DISSIGNATOR CONTROL DOCUMENT

08/28/84

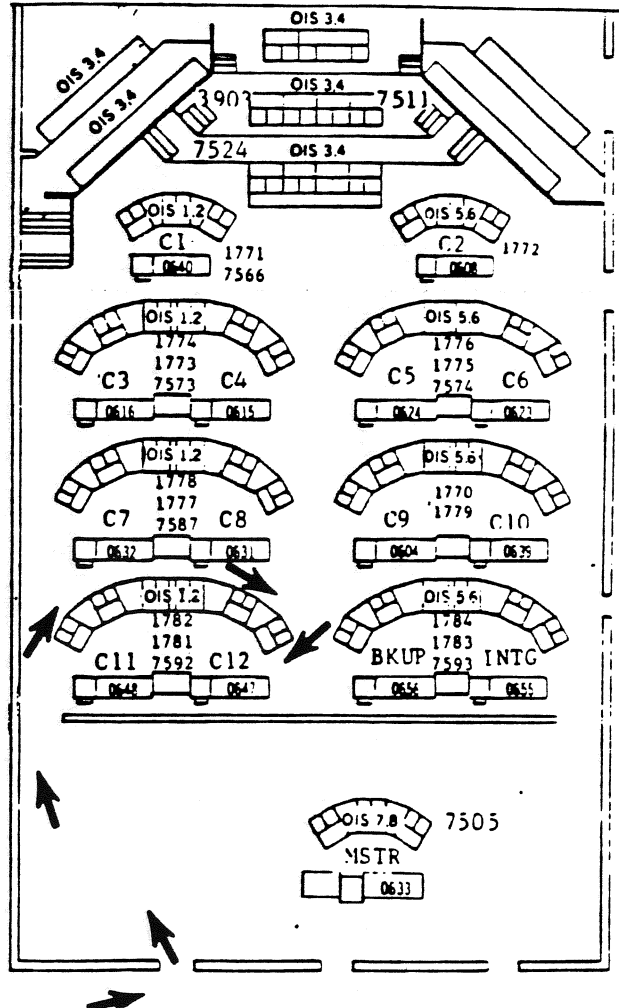
CCMS REV 90893

FD NAME	NOMENCLATURE	TYPE	ODIS	RSYS	OWN BY	SET BY	USE BY	LOC SIG	AUTH
R031S049E	MANUAL_HOLD	PD	INTEG	INTEG	INTEG	INTEG	INTEG	K K	BASELINE
	DESC: USED IN MAINLINE TO INDICATE A MANUAL HOLD IS REQUESTED.								
R031S049D	MASK ROW 49	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K K	:
	DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.								
R031S049E	BHYP_LIMITS_AND_CONTROL_TO_GLS	PD	INTEG	INTEG	INTEG	INTEG	INTEG	K K	BASELINE
	DESC: SHOWS WHEN GLS LIMITS AND FDS CCM SET.								
R031S050D	MASK ROW 50	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K K	:
	DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.								
R031S050E	HYD_LIMITS_AND_CONTROL_TO_GLS	PD	INTEG	INTEG	INTEG	INTEG	INTEG	K K	BASELINE
	DESC: SHOWS WHEN GLS LIMITS AND FDS CCM SET.								
R031S051D	FAILURE ROW 1	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K K	:
	DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.								
R031S051E	APU_LIMITS_AND_CONTROL_TO_GLS	PD	INTEG	INTEG	INTEG	INTEG	INTEG	K K	BASELINE
	DESC: SHOWS WHEN GLS LIMITS AND FDS CCM SET.								
R031S052D	FAILURE ROW 2	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K K	:
	DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.								
R031S052E	L02_LIMITS_AND_CONTROL_TO_GLS	PD	INTEG	INTEG	INTEG	INTEG	INTEG	K K	BASELINE
	DESC: SHOWS WHEN GLS LIMITS AND FDS CCM SET.								
R031S053D	FAILURE ROW 3	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K K	:
	DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.								
R031S053E	LH2_LIMITS_AND_CONTROL_TO_GLS	PD	INTEG	INTEG	INTEG	INTEG	INTEG	K K	BASELINE
	DESC: SHOWS WHEN GLS LIMITS AND FDS CCM SET.								
R031S054D	FAILURE ROW 4	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K K	:
	DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.								
R031S054E	HYOXID_LIMITS_AND_CONTROL_TO_GLS	PD	INTEG	INTEG	INTEG	INTEG	INTEG	K K	BASELINE
	DESC: SHOWS WHEN GLS LIMITS AND FDS CCM SET.								
R031S055D	FAILURE ROW 5	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K K	:
	DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.								
R031S055E	HYFUEL_LIMITS_AND_CONTROL_TO_GLS	PD	INTEG	INTEG	INTEG	INTEG	INTEG	K K	BASELINE
	DESC: SHOWS WHEN GLS LIMITS AND FDS CCM SET.								
R031S056D	FAILURE ROW 6	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K K	:
	DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.								

## FR-2 Standard Configuration



## FR-3 Standard Configuration



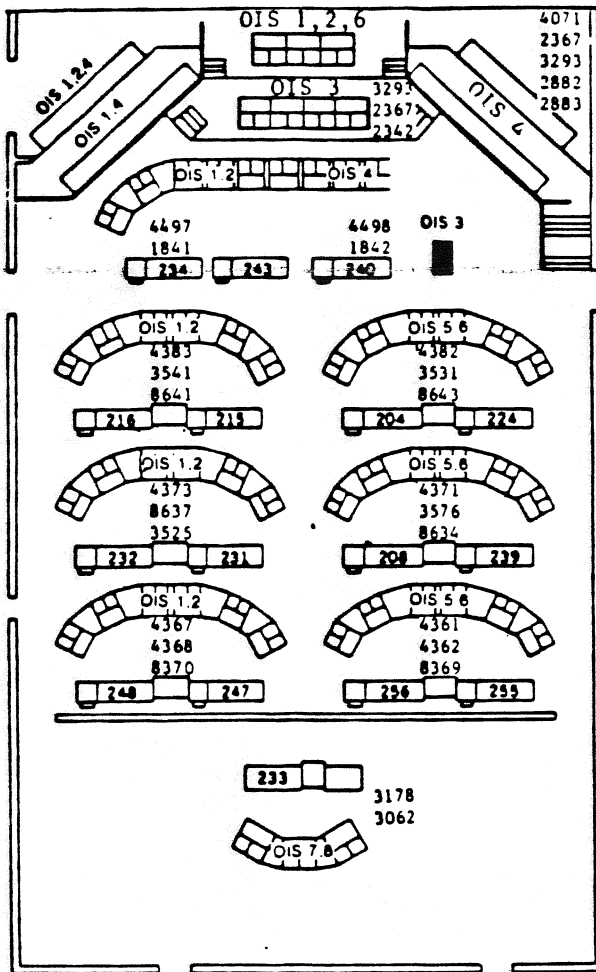
RETURN TO CONSOLE 0647-C12-DPS AFTER REPAIRS - OPTION 1

INCLUDING RELOAD OF SOFTWARE (1 HOUR)  
WITHOUT RELOAD OF SOFTWARE (20 MINUTES)

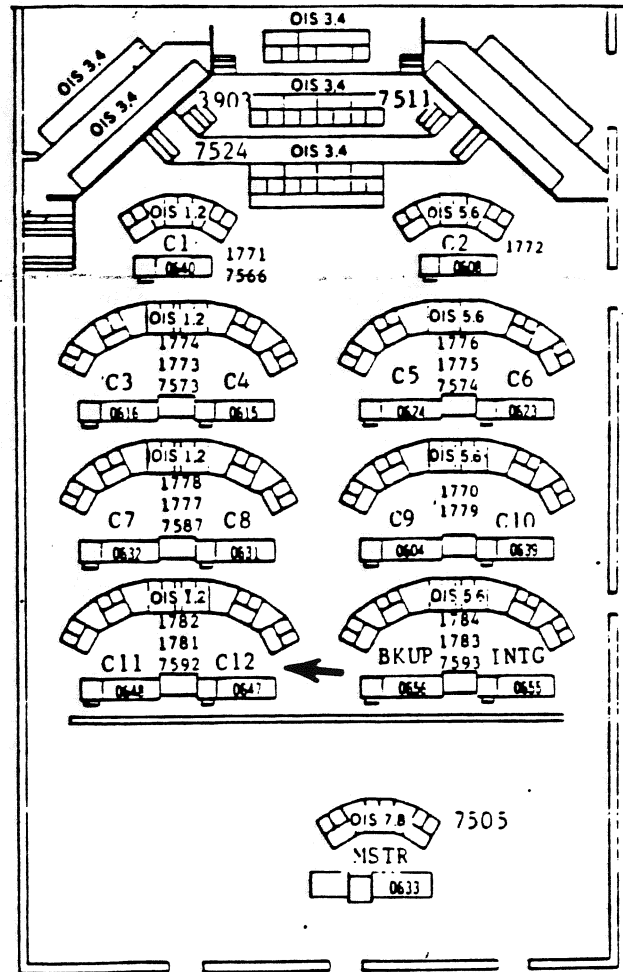
1. THE FOLLOWING PERSONNEL WILL RELOCATE:  
CDPS MOVES TO H/W 0647-C12-DPS
2. CDPS AT CONSOLE 0647-C12-DPS PERFORM  
VAS59, VAS97, VASJ6 AND VAE73 (5 MINUTES)
3. BMAP CONSOLE 0233 - MSTR-BOOT STANDALONE OFF BUFFER

TOTAL TIME = 25 MINUTES OR  
1 HOUR  
5 MINUTES

## FR-2 Standard Configuration



## FR-3 Standard Configuration



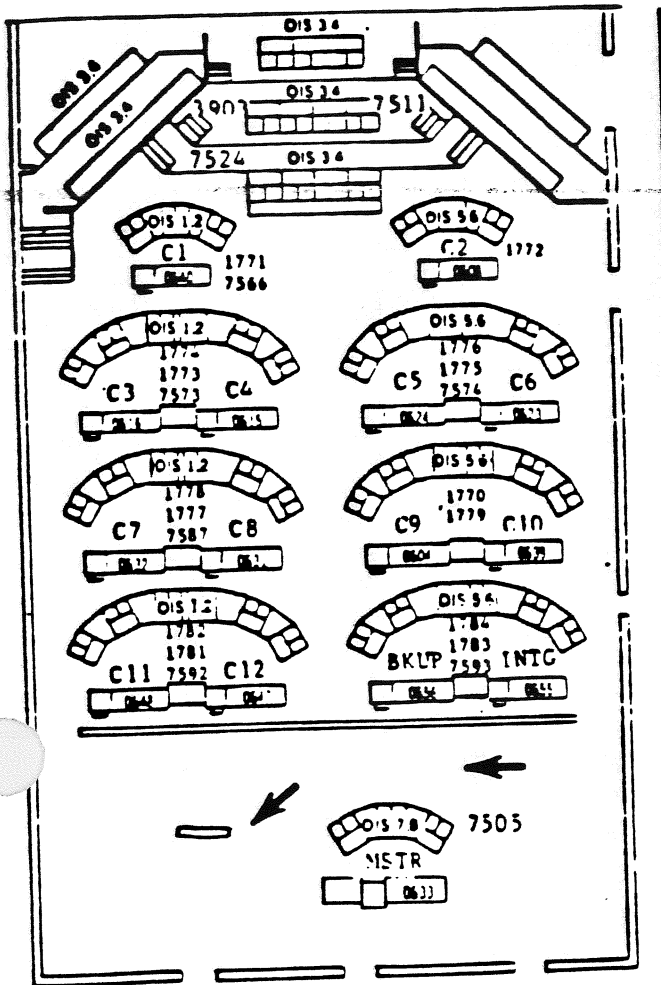
RETURN TO CONSOLE 0647-C12-DPS AFTER REPAIRS - OPTION 2

INCLUDING RELOAD OF SOFTWARE (1 HOUR)  
WITHOUT RELOAD OF SOFTWARE (20 MINUTES)

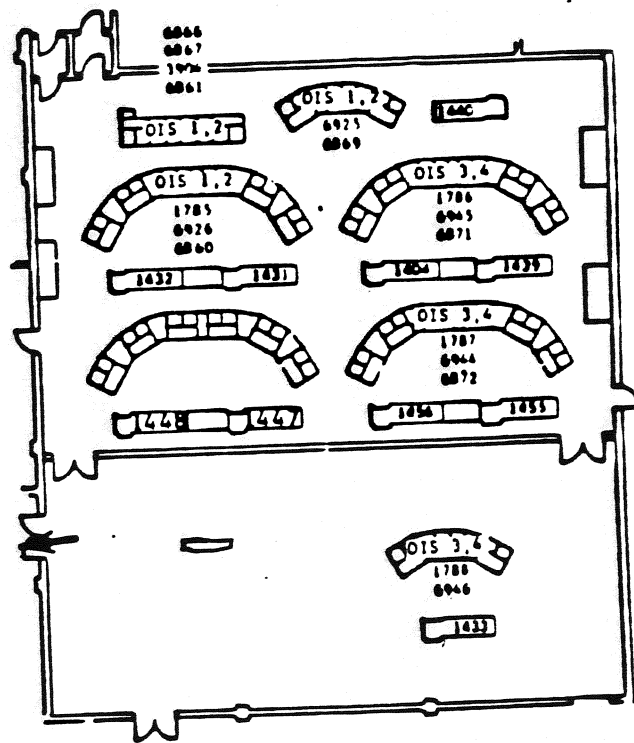
1. THE FOLLOWING PERSONNEL WILL RELOCATE:  
CDPS MOVES TO H/W 0647-C12-DPS  
SSME MOVES TO H/W 0647-C12
2. CDPS AT CONSOLE 0647-C12-DPS PERFORM  
VAS59, VAS97, VASJ6 AND VAE73 (5 MINUTES)

TOTAL TIME = 25 MINUTES OR  
1 HOUR  
5 MINUTES

# FR-3 Standard Configuration



# FR-4 Standard Configuration



RETURN 0600-PDR/SPA TO SUPPORT AFTER REPAIRS

30 MINUTES - 15 MINUTES TO START RECORDING - PLUS  
15 MINUTES FOR TAPE/DISC DATA VERIFICATION

1. THE FOLLOWING PERSONNEL RELOCATE:  
CDPR MOVES TO 0600 PDR/SPA

TOTAL TIME = 30 MINUTES

RECOVERY FROM PCM FEP REDUNDANT SWITCH  
(FROM CTS TO 2H 30 MIN)

## NOTE

1. THE FOLLOWING RECOVERY STEPS WILL BE PERFORMED AFTER SPE CONCURRENCE.
2. PERFORM THE FOLLOWING STEPS AFTER FEP FAILURE RESULTING IN ACTIVE/STANDBY REDUNDANT SWITCH.

01-001 LPS C1MC CONFIGURE STANDBY TO SPARE  
C3MC PCM FEP.

DISABLE BAC / (FAILED FEP)  
ENABLE BAC / (SPARE FEP)

## NOTE

THE FOLLOWING STEP MAY REQUIRE ACTIVE FEP LIMITS. VERIFY LIMITS PER \$SYS ON STANDBY SUBSYSTEM BEING LOADED.

01-002. LPS C1MC AT CDBFR 0650 PERFORM:  
C3MC ENTER \_\_\_\_\_ AND \_\_\_\_\_ LIMIT INTO BAC /  
LPWA UPWA

3-2-1 MARK (XMIT LIMITS)

01-003 LPS C1MC BOOT SPARE FEP #0012.  
C3MC

01-004 LPS C1MC CONSOLE KEYBOARD:  
C3MC C,PP,OIS, (XMIT CMD/EXEC CMD)  
GPCS  
\$CLAI OIS/GPCS  
A,DA, OIS/GPCS (XMIT CMD/EXEC CMD)

01-005 C1MC LPS ACTIVE/STANDBY FEP RECOVERY COMPLETE.  
C3MC

## RECOVERY FROM PCM FEP REDUNDANT SWITCH (DOD)

(FROM T-2H 30 MIN TO T-12 MIN)  
(PRIOR TO GL PENDING SET)

## NOTE

1. THE FOLLOWING RECOVERY STEPS WILL BE PERFORMED AFTER SPE CONCURRENCE.
2. DO NOT PERFORM THE FOLLOWING RECOVERY AFTER T-12 MINUTES.
3. PERFORM THE FOLLOWING STEPS AFTER FEP FAILURE RESULTING IN ACTIVE/STANDBY REDUNDANT SWITCH WITH STANDBY ACTIVE ON R.F. SOURCE.

CAUTION

DO NOT PERFORM THE FOLLOWING RECOVERY IF T-20 MIN DUMP IS IN PROGRESS. LPS MUST VERIFY DUMP COMPLETE BEFORE PROCEEDING.

## NOTE

1. EXECUTE APPLICABLE COMMAND REQUIRED FOR RECOVERY.

01-001	LPS C1MC C3MC	CONSOLE KEYBOARD: PCMS,OIA,RH,S1,,,VN (XMIT CMD/EXEC CMD)	NOT PERFORMED _____
01-002	LPS C1MC C3MC	CONSOLE KEYBOARD: PCMS,GPCA,RH,S1,,,VN (XMIT CMD/EXEC)	NOT PERFORMED _____
01-003	LPS C1MC C3MC	VERIFY ACTIVE FEP PROCESSING DATA ON SOURCE 1, 128KB	
01-004	LPS C1MC C3MC	CONFIGURE STANDBY TO SPARE PCM FEP.	
		DISABLE BAC _____/_____ (FAILED FEP) ENABLE BAD _____/_____ (SPARE FEP)	



NOTE

THE FOLLOWING STEP MAY REQUIRE ACTIVE FEP LIMITS. VERIFY LIMITS PER \$SYS ON STANDBY SUBSYSTEM BEING LOADED.

01-005 LPS C1MC AT CDBFR 0650 PERFORM:  
C3MC ENTER LPWA AND UPWA LIMIT INTO BAC /

3-2-1 MARK (XMIT LIMITS)

01-006 LPS C1MC BOOT SPARE FEP #0012.  
C3MC

01-007 LPS C1MC CONSOLE KEYBOARD:  
C3MC C,PP,OIS,\_\_,\_ (XMIT CMD/EXEC CMD)  
GPCS  
\$CLAI OIS/GPCS

01-008 LPS C1MC VERIFY VIDEO SWITCH CONNECTIONS  
C3MC FOR SOURCE 1 AND 2 MADE TO SPARE/  
STANDBY FEP.

NOT PERFORMED \_\_\_\_\_

NOTE

1. COMMAND FILES ARE PROVIDED FOR RECOVERY OF EITHER OIA OR GPCA REDUNDANT SWITCH. EXECUTE APPLICABLE COMMAND FILE REQUIRED FOR RECOVERY.
2. THE FOLLOWING TWO STEPS REQUIRE TWO APPLICATION TCB'S FOR EXECUTION.

01-009 LPS C1MC CONSOLE KEYBOARD:  
C3MC \$CMD V4 CF OISS2 (PERF PGM)

NOT PERFORMED \_\_\_\_\_

(CMD FILE CONTENTS)  
CMD .....;A DA OIS;  
EXEC  
CMD .....;PCMS,OIS.....CANC;  
EXEC  
CMD .....;PCMS,OIS,RH,S2...VY;  
EXEC  
CMD .....;A RS OIA;  
\$END

1-010

LPS C1MC  
C3MC

CONSOLE KEYBOARD:  
\$CMD V4 CF GPCSS2 (PERF PGM)

NOT PERFORMED

(CMD FILE CONTENTS)

CMD ,,,,;A DA GPCS;

EXEC

CMD ,,,,;PCMS,GPCS,,,,,CANC;

EXEC

CMD ,,,,;PCMS,GPCS,RH,S2,,VY;

EXEC

CMD ,,,,;A RS GPCA;

\$END

01-011

LPS C1MC  
C3MC

ACTIVE/STANDBY FEP RECOVERY COMPLETE.

## RECOVERY FROM PCM FEP REDUNDANT SWITCH (DOD)

(FROM T-12 MIN TO T-5 MIN)  
(AFTER TO GLS PENDING SET)

## NOTE

1. THE FOLLOWING RECOVERY STEPS WILL BE PERFORMED AFTER SPE CONCURRENCE.
2. DO NOT PERFORM THE FOLLOWING RECOVERY AFTER T-5 MINUTES.
3. PERFORM THE FOLLOWING STEPS AFTER FEP FAILURE RESULTING IN ACTIVE/STANDBY REDUNDANT SWITCH WITH STANDBY ACTIVE ON R.F. SOURCE.

CAUTION

DO NOT PERFORM THE FOLLOWING RECOVERY IF T-20 MIN DUMP IS IN PROGRESS. LPS MUST VERIFY DUMP COMPLETE BEFORE PROCEEDING.

## NOTE

1. TWO COMMAND FILES ARE PROVIDED FOR RECOVERY OF EITHER OIA OR GPCA REDUNDANT SWITCH AFTER T-12 MIN. EXECUTE APPLICABLE COMMAND FILE REQUIRED FOR RECOVERY.

01-001      LPS C1MC      CONSOLE KEYBOARD:  
                  C3MC      \$CMD V4 CF OIAS1 (PERF PGM)

NOT PERFORMED \_\_\_\_\_

(CMD FILE CONTENTS)  
CMD, . . . ; PCMS, OIA, RH, S1, . . . , VN;  
EXEC  
CMD, . . . ; PCMS, OIA, RH, S2, . . . , VY, PEND;  
EXEC  
\$END

01-002

LPS C1MC  
C3MCCONSOLE KEYBOARD:  
\$CMD V4 CF GPCAS1 (PERF PGM)

NOT PERFORMED

(CMD FILE CONTENTS)

CMD,,,,;PCMS,GPCA,RH,S1,,,VN;  
EXEC  
CMD,,,,;PCMS,GPCA,RH,S2,,,VY,PEND;  
EXEC  
\$END

01-003

LPS C1MC  
C3MCVERIFY ACTIVE FEP PROCESSING DATA  
ON SOURCE 1, 128KB

01-004

LPS C1MC  
C3MC

CONFIGURE STANDBY TO SPARE PCM FEP.

DISABLE BAC \_\_\_\_\_/\_\_\_\_\_ (FAILED FEP)  
ENABLE BAD \_\_\_\_\_/\_\_\_\_\_ (SPARE FEP)

## NOTE

THE FOLLOWING STEP MAY REQUIRE ACTIVE  
FEP LIMITS. VERIFY LIMITS PER \$SYS ON  
STANDBY SUBSYSTEM BEING LOADED.

01-005

LPS C1MC  
C3MC

AT CDBFR 0650 PERFORM:

ENTER \_\_\_\_\_ AND \_\_\_\_\_ LIMIT INTO BAC \_\_\_/\_\_\_  
LPWA UPWA

3-2-1 MARK (XMIT LIMITS)

01-006

LPS C1MC  
C3MC

BOOT SPARE FEP #0012.

01-007

LPS C1MC  
C3MCCONSOLE KEYBOARD:  
C,PP,OIS,\_\_,\_ (XMIT CMD/EXEC CMD)  
GPCS  
\$CLAI OIS/GPCS

01-008

LPS C1MC  
C3MCVERIFY VIDEO SWITCH CONNECTIONS  
FOR SOURCE 1 AND 2 MADE TO SPARE FEP.

## NOTE

1. TWO COMMAND FILES ARE PROVIDED FOR RECOVERY OF EITHER OIA OR GPCA REDUNDANT SWITCH. EXECUTE APPLICABLE COMMAND FILE REQUIRED FOR RECOVERY.
2. THE FOLLOWING TWO STEPS REQUIRE TWO APPLICATION TCB'S FOR EXECUTION.

01-009

LPS C1MC    CONSOLE KEYBOARD:  
 C3MC       \$CMD V4 CF OISS2 (PERF PGM)

NOT PERFORMED \_\_\_\_\_

(CMD FILE CONTENTS)

CMD,.,.,;A DA OIS;  
 EXEC  
 CMD,.,.,;PCMS,OIS,.,.,.,CANC;  
 EXEC  
 CMD,.,.,;PCMS,OIS,RH,S2,.,.,VY;  
 EXEC  
 CMD,.,.,;A RS OIA;  
 \$END

01-010

LPS C1MC    CONSOLE KEYBOARD:  
 C3MC       \$CMD V4 CF GPCSS2 (PERF PGM)

NOT PERFORMED \_\_\_\_\_

(CMD FILE CONTENTS)

CMD,.,.,;A DA GPCS;  
 EXEC  
 CMD,.,.,;PCMS,GPCS,.,.,.,CANC;  
 EXEC  
 CMD,.,.,;PCMS,GPCS,4H,S2,.,.,VY;  
 EXEC  
 CMD,.,.,;A RS GPCA;  
 \$END

01-011

LPS C1MC    ACTIVE/STANDBY FEP RECOVERY COMPLETE.  
 C3MC

RECOVERY FROM PCM FEP REDUNDANT SWITCH (DOD)  
(FROM T-5 MIN TO T-31 SEC)

## NOTE

1. THE FOLLOWING RECOVERY STEPS WILL BE PERFORMED AFTER SPE CONCURRENCE.
2. PERFORM THE FOLLOWING STEPS AFTER FEP FAILURE RESULTING IN ACTIVE/STANDBY REDUNDANT SWITCH WITH STANDBY ACTIVE ON R.F. SOURCE.

CAUTION

DO NOT PERFORM THE FOLLOWING RECOVERY IF T-20 MIN DUMP IS IN PROGRESS. LPS MUST VERIFY DUMP COMPLETE BEFORE PROCEEDING.

## NOTE

1. TWO COMMAND FILES ARE PROVIDED FOR RECOVERY OF EITHER OIA OR GPCA REDUNDANT SWITCH AFTER T-12 MIN. EXECUTE APPLICABLE COMMAND FILE REQUIRED FOR RECOVERY.
2. THE FOLLOWING TWO STEPS REQUIRE APPLICATION TCB'S FOR EXECUTION.
3. FOLLOWING STEPS TO BE PERFORMED AT NEXT MILESTONE PRIOR TO T-31 SEC.

01-001

LPS C1MC  
C3MCCONSOLE KEYBOARD:  
\$CMD V4 CF OIAS1 (PERF PGM)

NOT PERFORMED \_\_\_\_\_

(CMD FILE CONTENTS)

```

CMD,.,.,;PCMS,OIA,RH,S1,.,.,VN;
EXEC
CMD,.,.,;PCMS,OIA,RH,S2,.,.,VY,PEND;
EXEC
$END

```

01-002

LPS C1MC  
C3MCCONSOLE KEYBOARD:  
\$CMD V4 CF GPCAS1 (PERF PGM)

NOT PERFORMED

(CMD FILE CONTENTS)

CMD.....;PCMS,GPCA,RH,S1,..,VN;

EXEC

CMD.....;PCMS,GPCA,RH,S2,..,VY,PEND;

EXEC

\$END

01-003

LPS C1MC  
C3MCVERIFY ACTIVE FEP PROCESSING DATA  
ON SOURCE 1, 128KB

01-004

LPS C1MC  
C3MC  
LPS LTD

ACTIVE FEP SWITCH TO HARDLINE COMPLETE.

10/25/85

REV. F

RECOVERY FROM PCM FEP REDUNDANT SWITCH (DOD)  
(AFTER T-31 SEC)

ACTIVE FEP - NO HOLD, CONTINUE COUNT ON R.F.

STANDBY FEP - NO HOLD, CONTINUE COUNT.



# LPS

## CR-3 LAUNCH/FR-2 MONITOR TERMINAL COUNTDOWN

### RECOVERY PLAN

### STS-33 & SUBS

*PRE-LIM*

**CONCUR:**

**SE-PEO** \_\_\_\_\_

**TPE** \_\_\_\_\_

**SC-LPS** \_\_\_\_\_

**GTS656** \_\_\_\_\_

**SE-GDS** \_\_\_\_\_

**LSO284** \_\_\_\_\_

**SO-TOD** \_\_\_\_\_

**OTC** \_\_\_\_\_

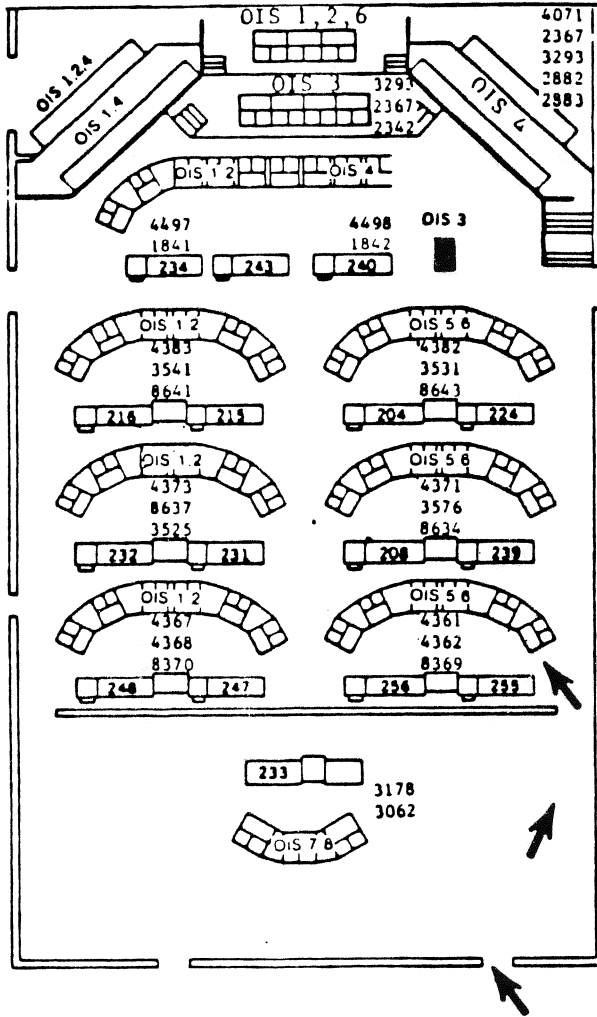
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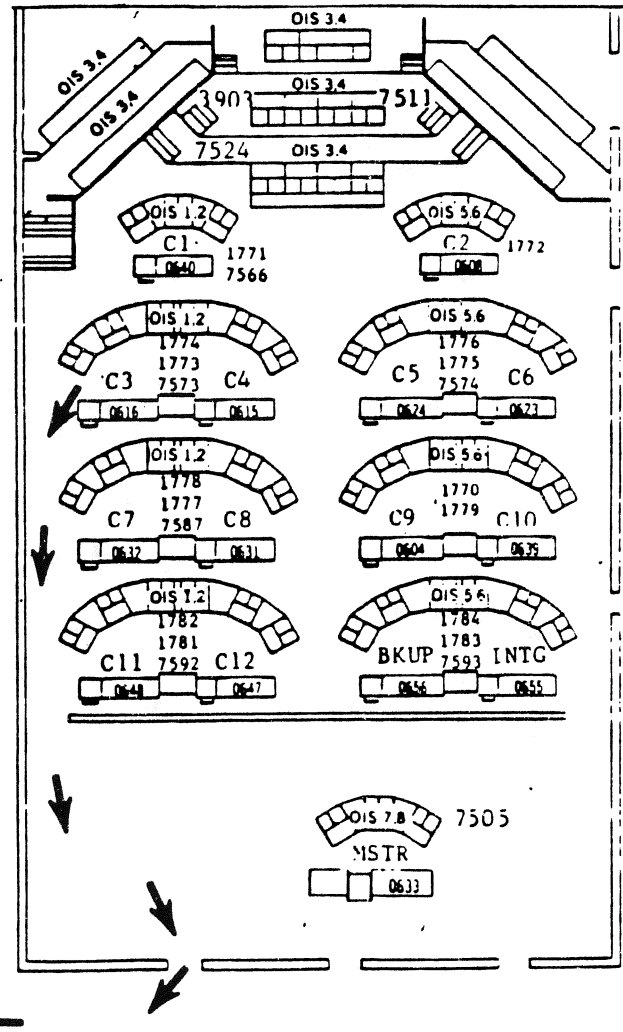
## APPENDIX

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## FR-2 Standard Configuration



## FR-3 Standard Configuration

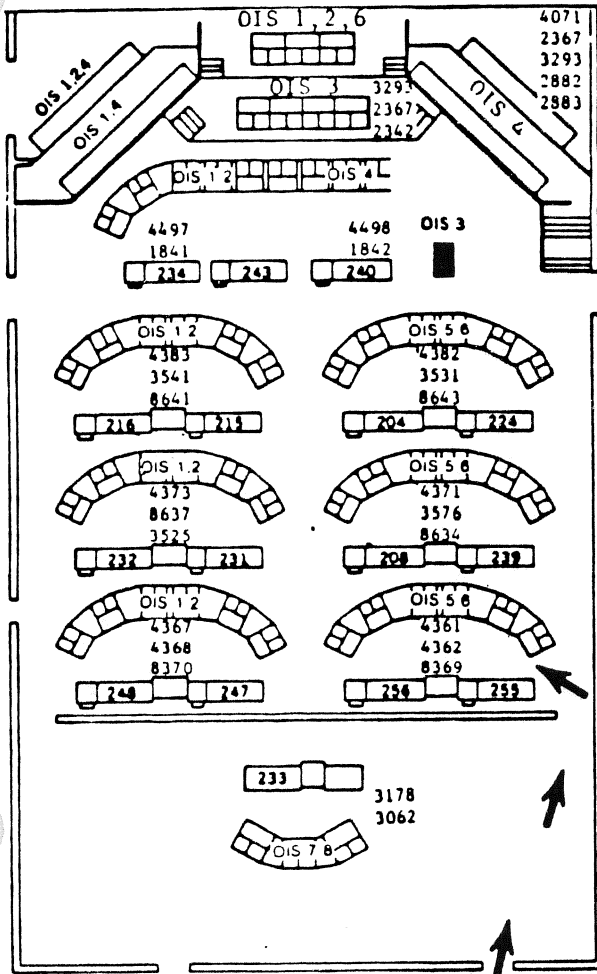


### H/W 0616-C3-LOX CONSOLE FAILURE

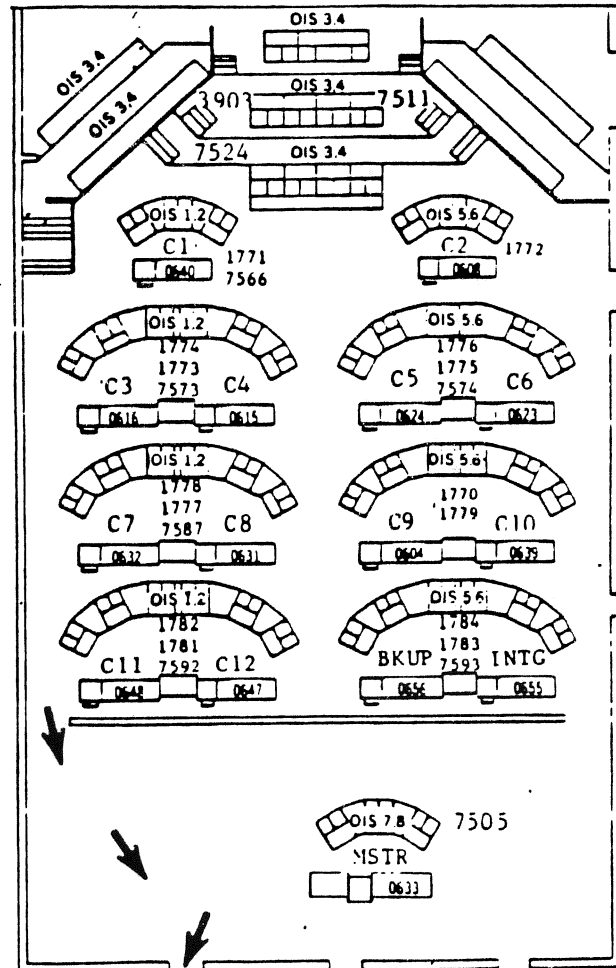
1. LPS initialize C3 FR-2 Console 0255 (C3 Hot Spare) Report completion (20 minutes).
2. CLOX at Console 0255 perform GAL01-reinitiate from revert (safing) per S1003 (15 minutes).
3. CLOX safing panel will remain manned at H/W 0616.
4. In the event of a C4-H/W 0615 failure Console 0255 (C3 Hot Spare) will be \$BMAP C4 and initialized into support at C4 (5 minutes).

TOTAL TIME = 25 MINUTES

## FR-2 Standard Configuration



## FR-3 Standard Configuration



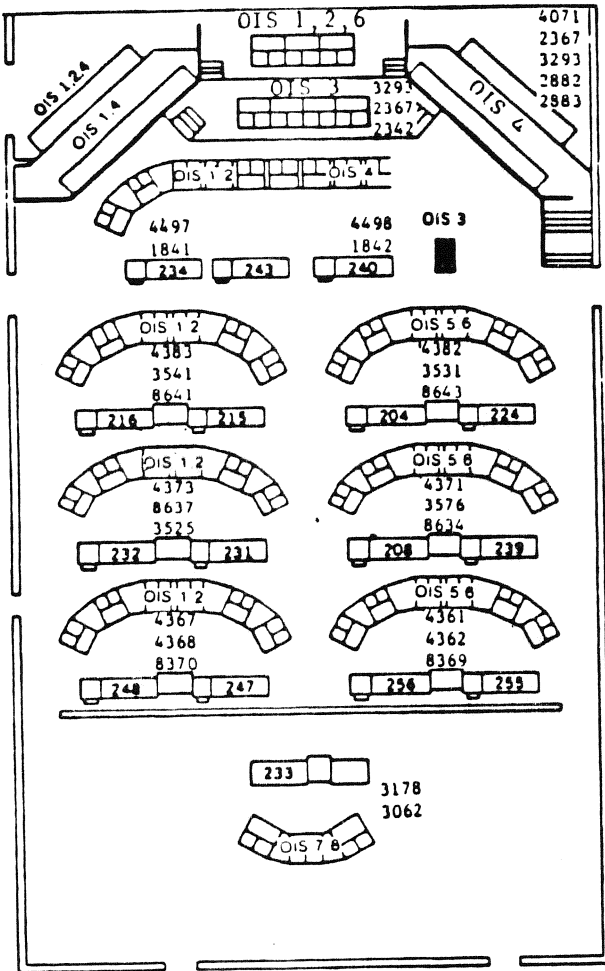
H/W O6XX - C(X) CONSOLE FAILURE

1. Preload and Initialize S/W C(X) into H/W 0255 (Utility Hot Spare). Report Completion.

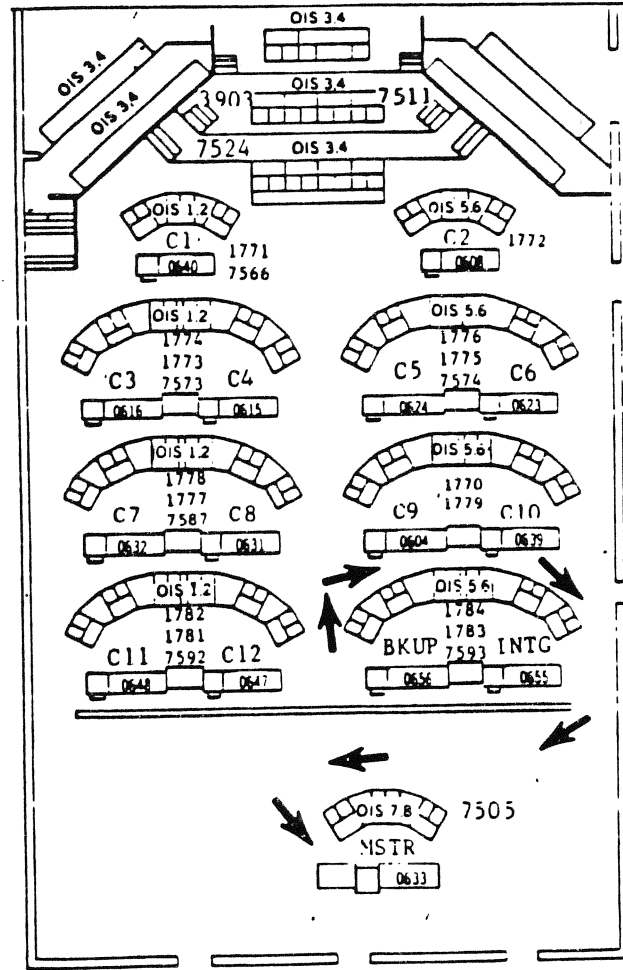
TOTAL TIME = 45 MINUTES

- NOTE:
1. S0007 utilized Console 0255 as C3 Hot Spare.
  2. Console 0255 may be used as a Utility Hot Spare with SPE Concurrency.

## FR-2 Standard Configuration



## FR-3 Standard Configuration



H/W 0656 - BKUP CONSOLE FAILURE OPTION 1

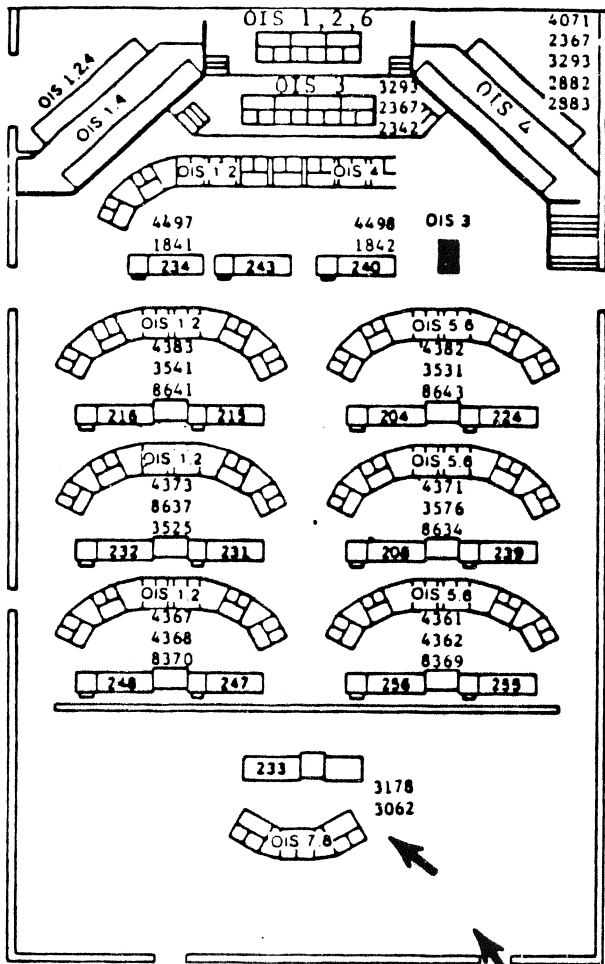
1. LPS VERIFY MSTR CONSOLE TCBS ARE AVAILABLE FOR FOLLOWING PROGRAM ASSIGNMENTS: (5 MINUTES)

TCB NOMINAL	TCB BKUP SUPPORT
1. \$FEPCPR	1. SLPBO
2. \$FEPCRR	2. SLPCO
3. AA001	3. SLPA1
4. \$HWMON	4. SLPAO
5. AWP01	5. AWP01
6. SLPP1	6. SLPP1

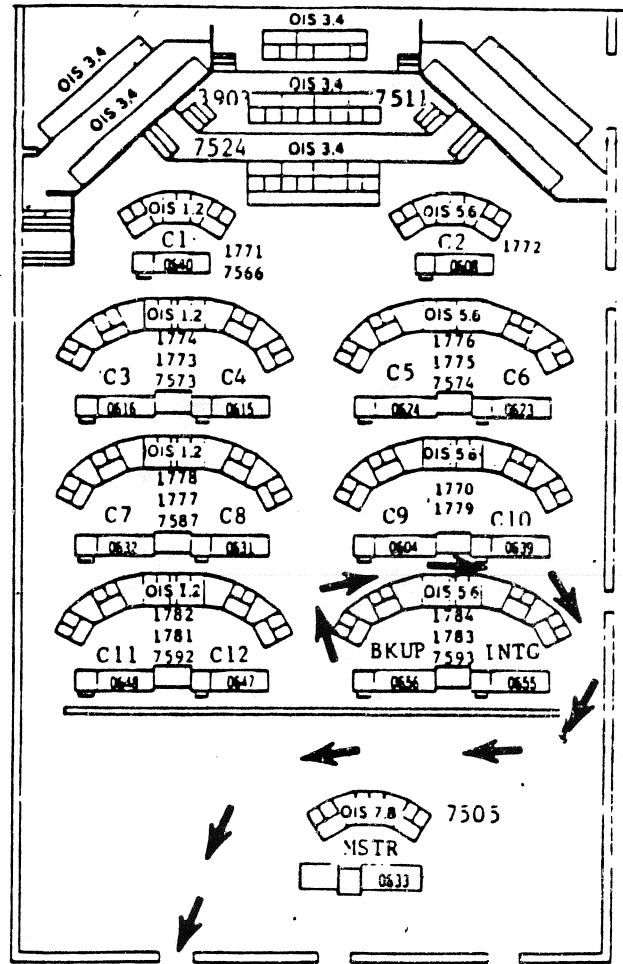
2. THE FOLLOWING PERSONNEL RELOCATE:  
CGLS/CTPE MOVES TO H/W 0633A1 - MSTR CONSOLE
3. CGLS PERFORM LIMIT CHANGE (5 MINUTES)

TOTAL TIME = 10 MINUTES

## FR-2 Standard Configuration



## FR-3 Standard Configuration



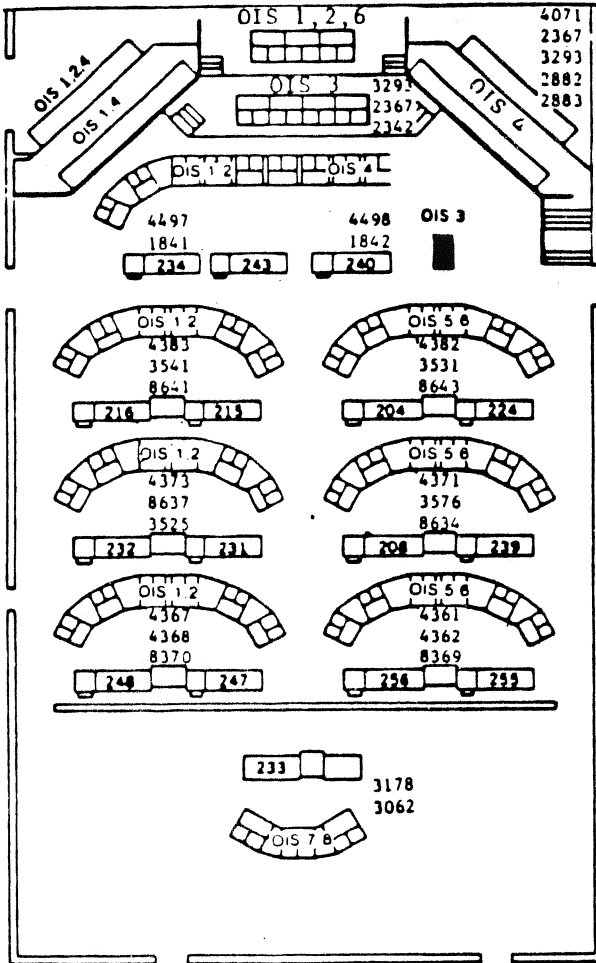
H/W 0656 - BKUP CONSOLE FAILURE OPTION 2

1. LPS VERIFY MSTR CONSOLE TCBS ARE AVAILABLE FOR FOLLOWING PROGRAM ASSIGNMENTS: (5 MINUTES)
 

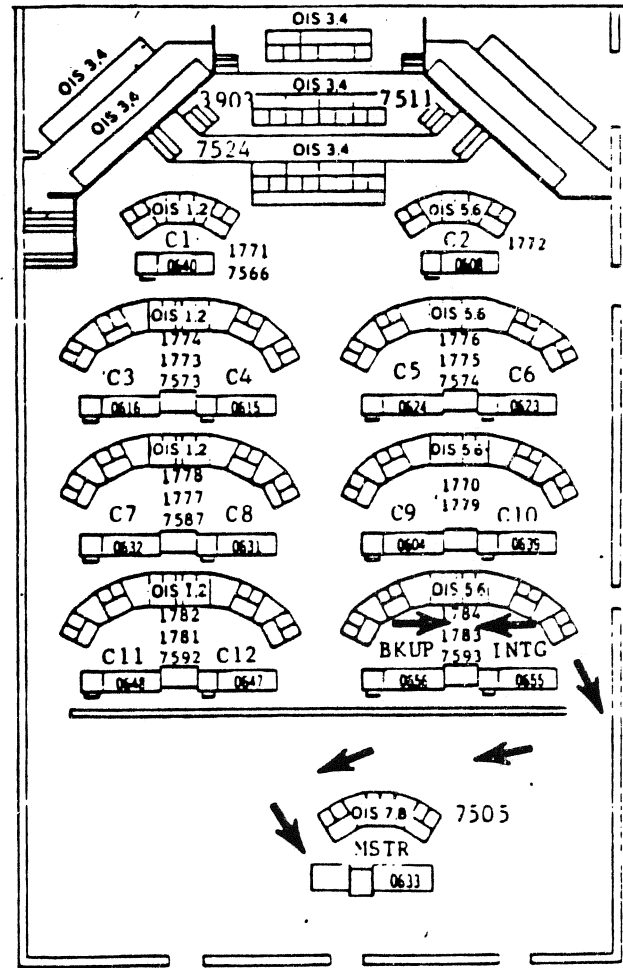
TCB NOMINAL	TCB BKUP SUPPORT
1. \$FEPCPR	1. SLPBO
2. \$FEPCPR	2. SLPCO
3. AA001	3. SLPAI
4. \$HWMON	4. SLPAO
5. AWP01	5. AWP01
6. SLPP1	6. SLPP1
2. LPS
  - \$BMAP (0233)
  - SET PWA LIMITS IN CDBFR 0650 FOR H/W 0233 BKUP
  - CHANGE PHYSICAL PORT FOR H/W 0233 BKUP
  - \$CLAI BKUP
3. THE FOLLOWING PERSONNEL REOCATE: CGLS/CTPE MOVES TO H/W 0233A1 - MSTR CONSOLE ET/SRB PERSONNEL AT SPE DISCRETION
4. CGLS PERFORM LIMIT CHANGE (5 MINUTES)

TOTAL TIME = 10 MINUTES

## FR-2 Standard Configuration



## FR-3 Standard Configuration



H/W 0655 - INTG CONSOLE FAILURE

GLS MAINLINE RUNS AT BKUP

1. LPS VERIFY MSTR CONSOLE TCBS ARE AVAILABLE FOR FOLLOWING PROGRAM ASSIGNMENTS: (5 MINUTES)

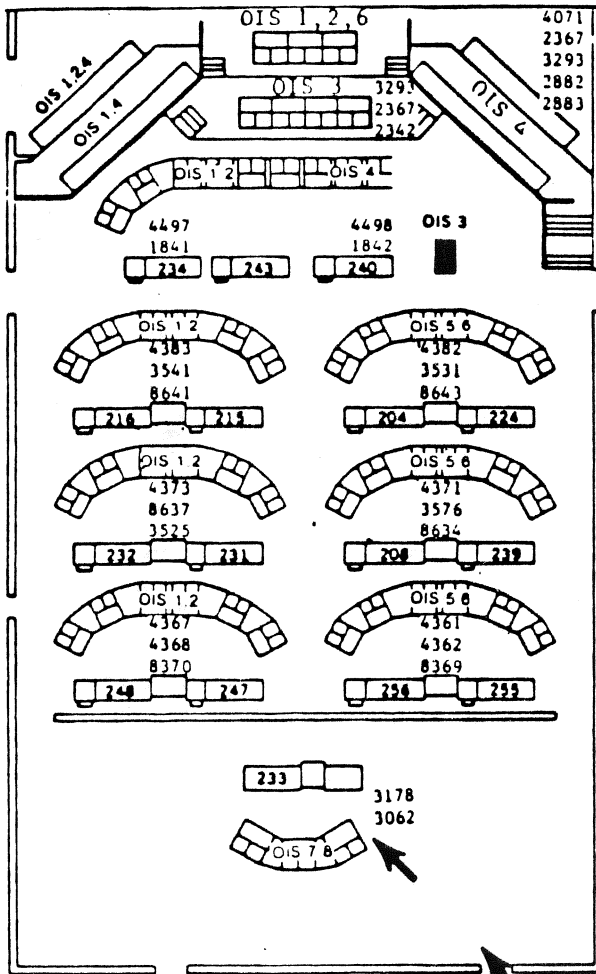
TCB NOMINAL	TCB BKUP SUPPORT
1. \$FEPCPR	1. SLPBO
2. \$FEPCPR	2. SLPCO
3. AA001	3. SLPA1
4. \$HWMON	4. SLPA0
5. AWP01	5. AWP01
6. SLPP1	6. SLPP1

2. THE FOLLOWING PERSONNEL RELOCATE:
  - INTG MOVES TO H/W 0656 - BKUP
  - BKUP MOVES TO H/W 0655 - INTG (FOR OIS USE)
  - CGLS/CTPE MOVES TO H/W 0633A1 - MSTR CONSOLE

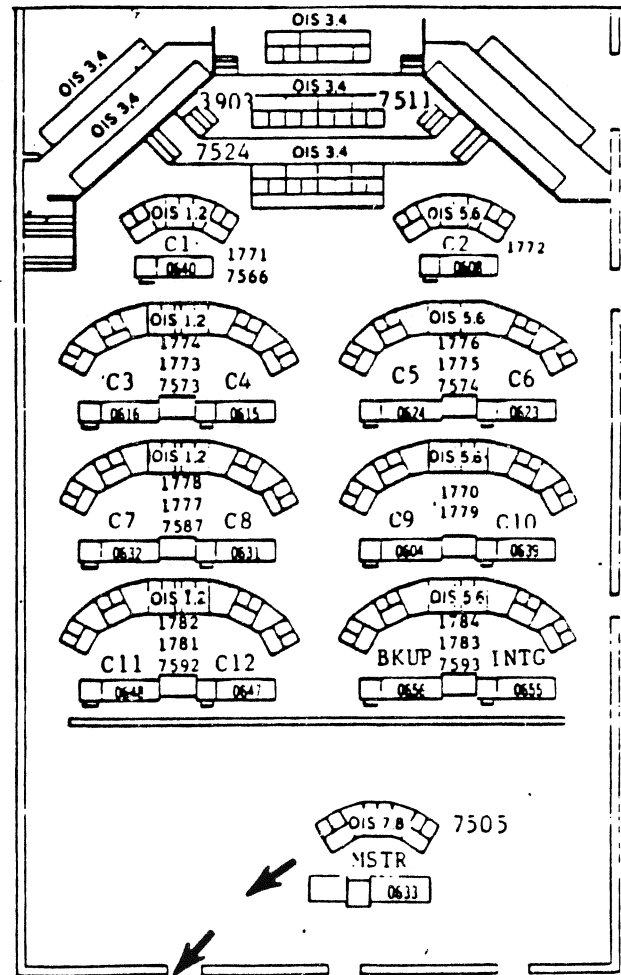
NOTE: IF INTG CONSOLE FAILURE OCCURS, THEN LPS MUST HAVE SPE CONCURRENCE FOR H/W 0655 REINITIALIZATION, OTHERWISE CONSOLE WILL REMAIN DOWN THROUGH T-0.

TOTAL TIME = 10 MINUTES

## FR-2 Standard Configuration



## FR-3 Standard Configuration



H/W 0633 - MSTR CONSOLE FAILURE

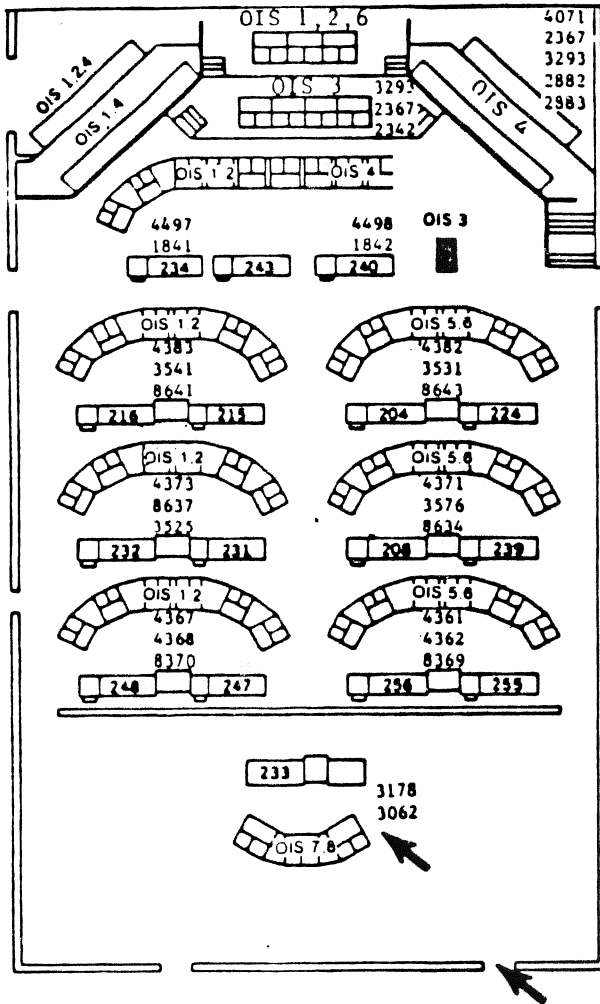
1. LPS CONFIGURE/WARM BOOT H/W 0233 - MSTR CONSOLE IN SUPPORT (15 MINUTES)
2. THE FOLLOWING PERSONNEL RELOCATE:  
LPS, C3MC, C3SE, C3SM MOVES TO H/W 0233 - MSTR CONSOLE
3. TCB ASSIGNMENTS
  1. \$FEPCPR
  2. \$FEPCPR
  3. AA001
  4. \$HWMON
  5. AWP01
  6. SLPP1

NOTE: SLPP1 NEEDS TO BE BROUGHT UP AT INTG/BU.

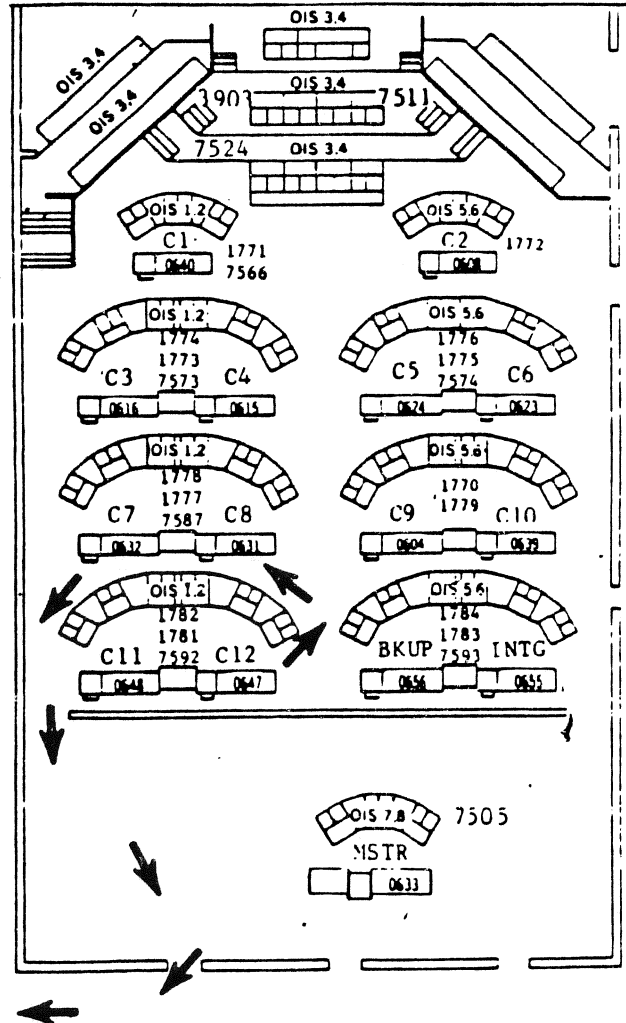
TOTAL TIME = 15 MINUTES



## FR-2 Standard Configuration



## FR-3 Standard Configuration



H/W 0647-C12-DPS-CONSOLE FAILURE - OPTION 1

CPDR IF FAILURE OCCURS UNDER T-3 HRS, MOUNT T-20 MINUTES. COMPARE TAPE ON TAPE UNIT LOGICAL T-0 AND SET TO 1600 BPI. VERIFY TAPE DRIVE HEADS ARE CLEAN. REPORT COMPLETION.

C3SE \$BMAP C12 FR-2 CONSOLE 0233 (MSTR HOT SPARE)  
BOOT CONSOLE 0233 #0012. REPORT COMPLETION.

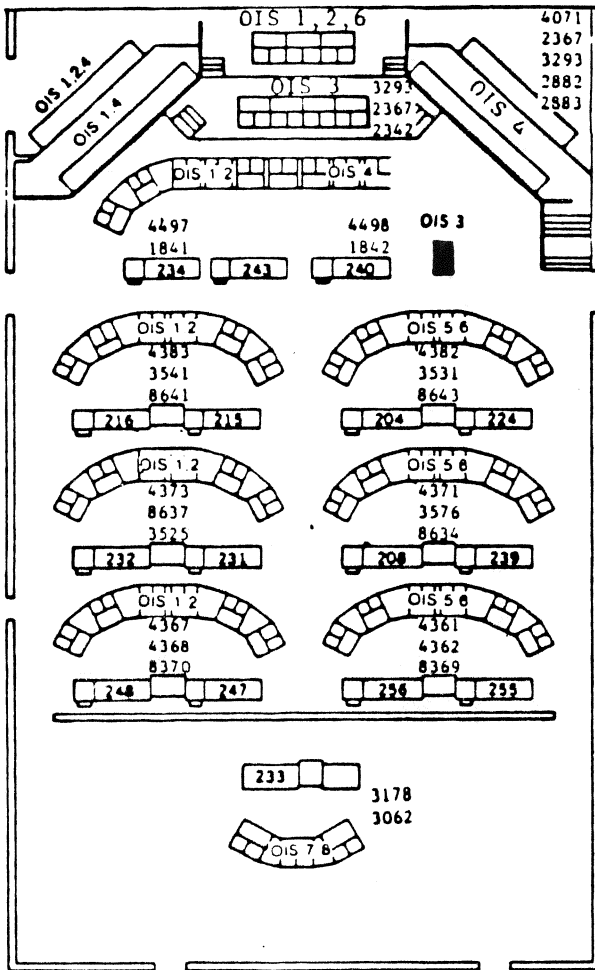
C3MC PERFORM: - CHANGE C12 PHYSICAL PORT  
- \$CLAI C12

C3SE VERIFY SUCCESSFUL C12 INITIALIZATION (CONSOLE 0233) (5 MINUTES)

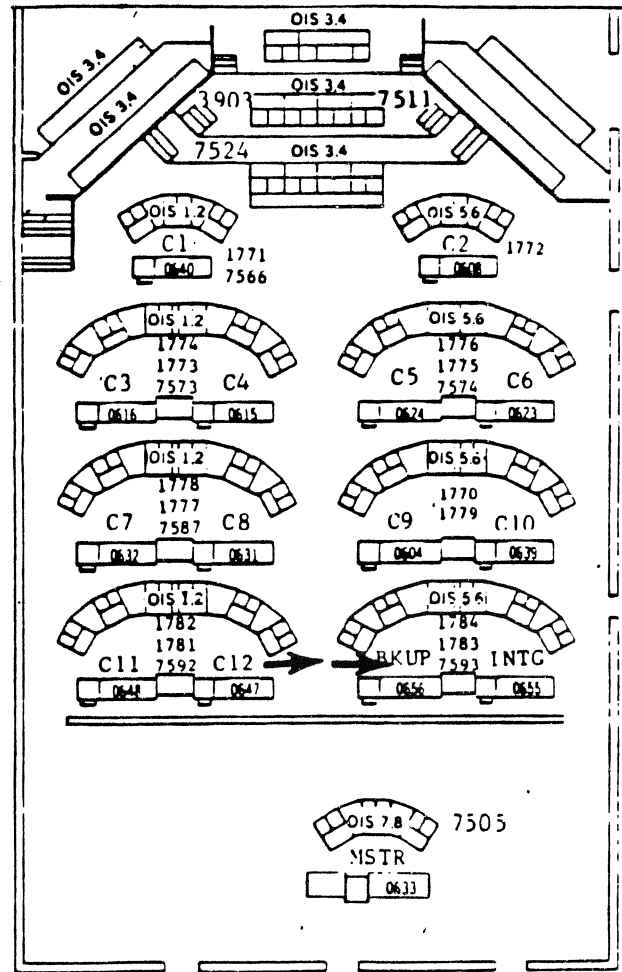
CDPS AT CONSOLE 0233 PERFORM VAS59, VAS97, VASB9, VASJ6 (5 MINUTES)

TOTAL TIME = 10 MINUTES

## FR-2 Standard Configuration



## FR-3 Standard Configuration



H/W 0647-C12-DPS-CONSOLE FAILURE - OPTION 2  
(T-30 MINUTES THROUGH T-0)

CDPS RELOCATE TO BKUP CONSOLE A1 POSITION (2 CONCURRENCIES)  
PERFORM VAS59, VASB9 (5 MINUTES)

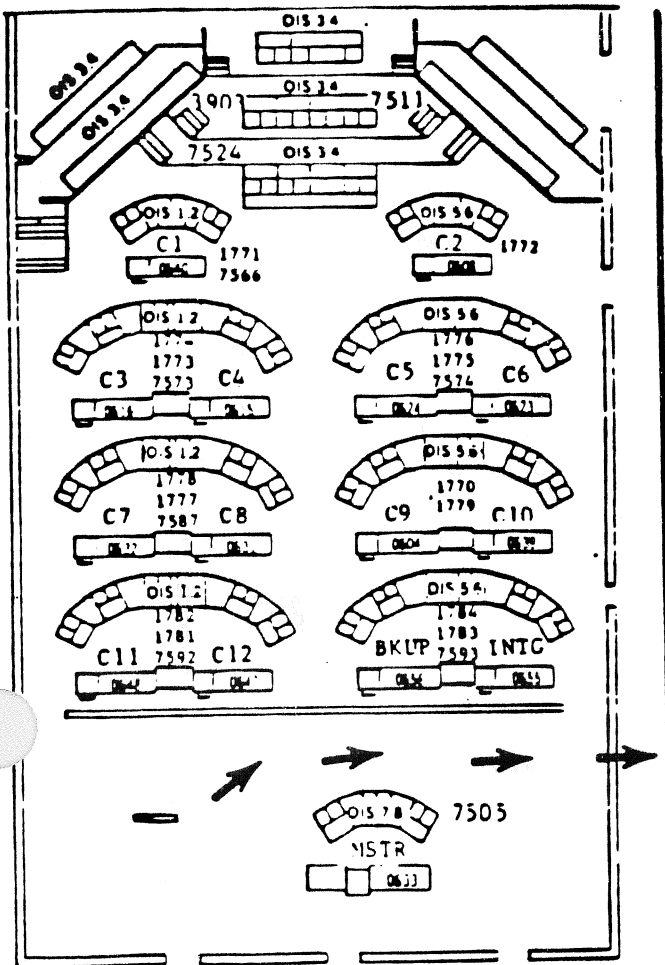
SSME RELOCATE TO MSTR CONSOLE 0633A1 (1 CONCURRENCY)  
PERFORM VSE04/VAE74 (5 MINUTES)

NOTE: TIME PERMITTING (TYPE OF H/W FAILURE) REMAINDER OF C12 PERSONNEL  
COULD RELOCATE TO FR-2 HOT SPARE MSTR.

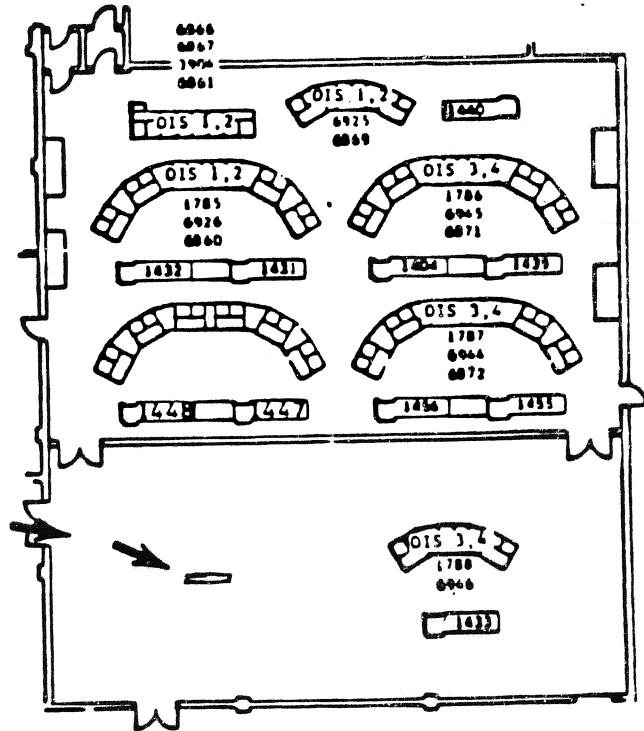
TOTAL TIME = 5 MINUTES

NOTE: IF C12 CONSOLE FAILURE OCCURS, THEN LPS MUST HAVE SPE CONCURRENCE  
FOR H/W 0647 REINITIALIZATION, OTHERWISE CONSOLE WILL REMAIN DOWN  
THROUGH T-0.

## FR-3 Standard Configuration



## FR-4 Standard Configuration



0600 PDR/SPA FAILURE

30 MINUTES = 15 MINUTES TO START RECORDING - PLUS  
15 MINUTES FOR TAPE/DISC DATA VERIFICATION

1. LPS CONFIGURE 1400 PDR/SPA UP IN SUPPORT (30 MINUTES)
2. THE FOLLOWING PERSONNEL RELOCATE:  
CPDR MOVES TO 1400 PDR/SPA

TOTAL TIME = 30 MINUTES

SUMMARY OF ON-LINE CDBFR SWITCHOVER

ALL ACTIVE TESTING SHOULD BE SUSPENDED DURING THE PERFORMANCE OF THE SWITCHOVER. USERS SHOULD BE IN SYSTEM MONITOR ONLY.

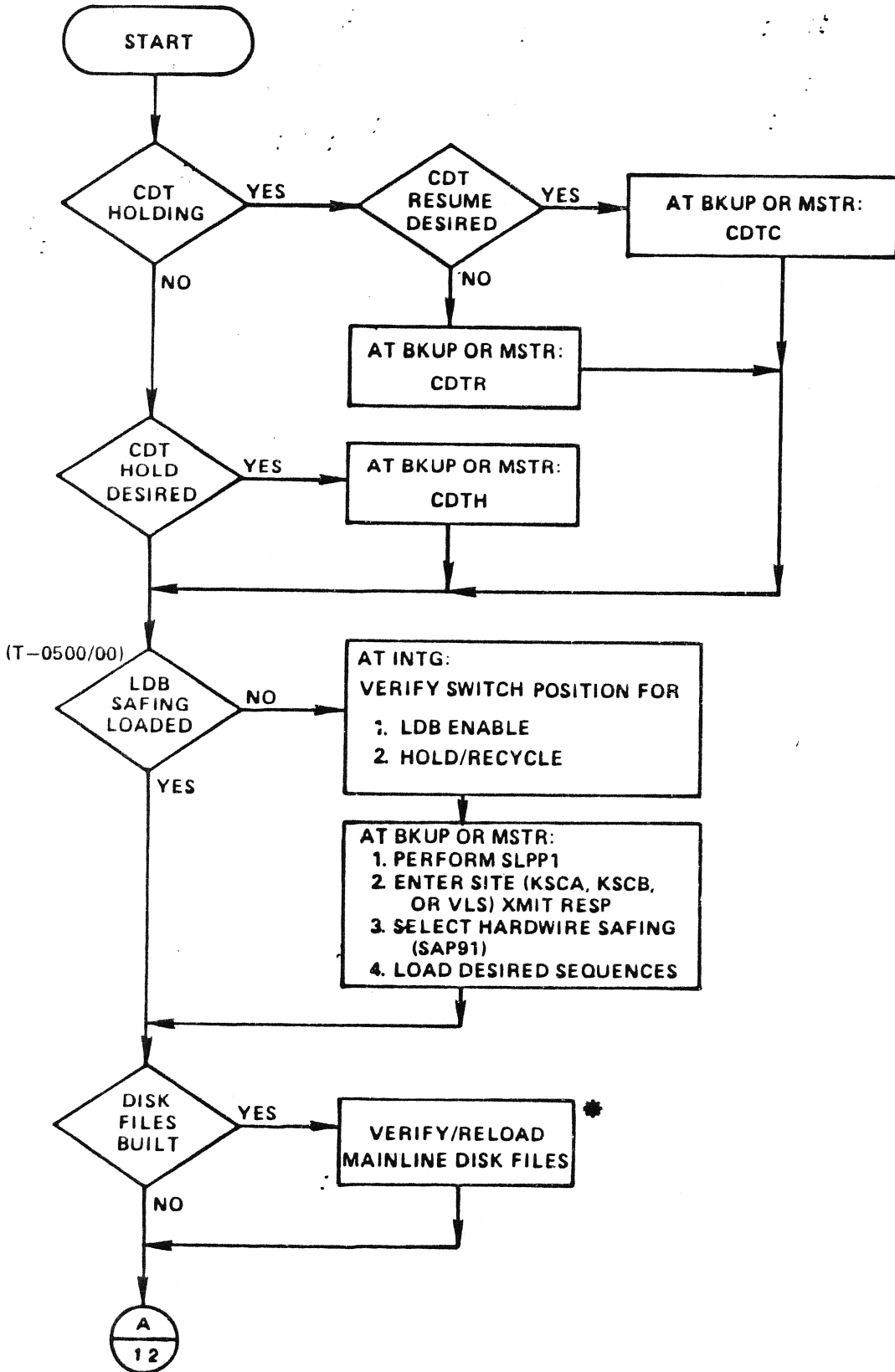
SET UP THE BACKUP CDBFR PER LOAD TPS "ATTACHMENT B" WITH CORRECT BUCKET/SLOT, LOWER AND UPPER LIMITS.

VERIFY \$FEPCPR ACTIVE AND CURRENT FOR ALL SUPPORTING FEPS, AND DEMAND UPDATE WILL BE PERFORMED AS REQUIRED.

\$FEPCPR AND SLPP1 WILL BE TERMINATED, MSTR CONSOLE HALTED AND SWITCHED TO THE BACKUP CDBFR. SYSTEM INTEGRITY WILL BE MONITORED AND SLPP1 WILL BE CALLED UP AT INTG CONSOLE. COLD BOOT MSTR ON BACKUP CDBFR, ZERO CDB (\$ZCDB) AND REBOOT COLD. REQUEST TDRR RECORDING ON BACKUP CDBFR TO BEGIN. FROM INTG CONSOLE TERM SPA, SWITCH SPA TO BACKUP CDBFR, \$CLAI SPA AT MSTR. PERFORM PSEUDO RESTORE FROM SPA (\$SPPSDR). FORCE REDUNDANT SWITCHES AS NECESSARY TO GET ALL FEP'S THAT ARE NOT IN CDB SWITCHER, UP AS STANDBY FEP'S. TERM ALL FEP'S EXCEPT GPCA, OIA, LDBA AND SITE-CRITICAL GSE'S. TERM ESA1, PP1, AND PP2. RECABLE ALL REQUIRED CPU'S TO BACKUP CDBFR. \$CLAI ALL CPU'S (FEPS WITH C.P. TABLES) ON BACKUP CDBFR FROM MSTR. LIMITS MAY HAVE TO BE CHANGED DUE TO REDUNDANT SWITCHING. A,DA PCM FEP'S ONLY. USERS AT C1 THROUGH C12 WILL TERM THEIR PROGRAMS AND MOVE TO BACKUP AND INTG CONSOLES FOR MONITORING. TERM C1 THROUGH C12 FROM INTG, SWITCH TO BACKUP CDBFR, AND \$CLAI FROM MSTR. DPS WILL STOP LDB POLLING VIA COCKPIT CONTROL. THE LDB AND GSE FEPS WILL BE INHIBITED FROM INTG CONSOLE. LDBA, GS1A AND GS2A WILL BE ACTIVATED AT MSTR CONSOLE. DPS WILL ENABLE LDB POLLING FROM COCKPIT.

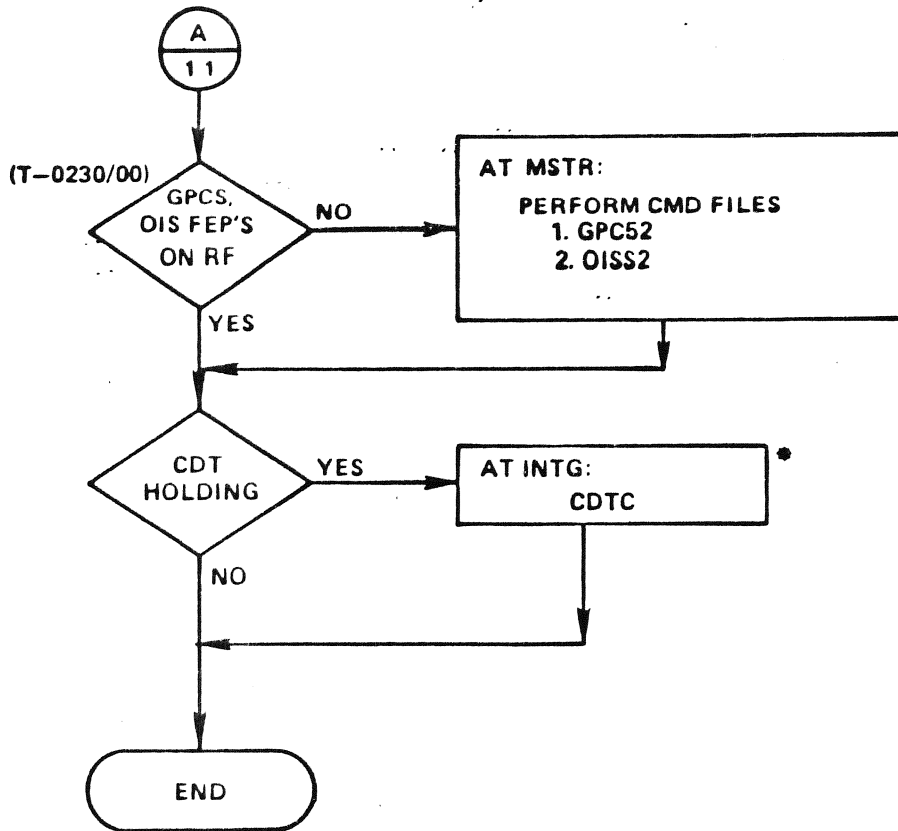
ALL FEPS (EXCEPT GPCA AND OIA) AND PDR WILL BE TERMINATED AT INTG CONSOLE AND SWITCHED TO THE BACKUP CDBFR AND \$CLAI WITH C.P. TABLES. USERS WILL RECALL PROGRAMS AT ALL CONSOLES AND VERIFY GOOD STATUS. PDR RECORDING WILL BE VERIFIED. A,DA GPCA AND OIA FROM MSTR CONSOLE. TERMINATE SLPP1 AT INTG. \$TERM ALL FROM INTG CONSOLE. SWITCH GPCA, OIA AND INTG CONSOLE TO BACKUP CDBFR AND \$CLAI (C.P. TABLES) AT MSTR CONSOLE. CDS WILL TERMINATE TDRR RECORDING ON PRIMARY CDBFR. SLPP1 WILL BE CALLED UP IN TCB-6 AT MSTR. BOOT MONITOR CONSOLES AND INITIALIZE CCP (IF APPLICABLE).

**INTEGRATION CRASH RECOVERY**  
**T-0500/00 THRU T-0200/00**  
**(PRIOR TO START OF GLS INIT)**



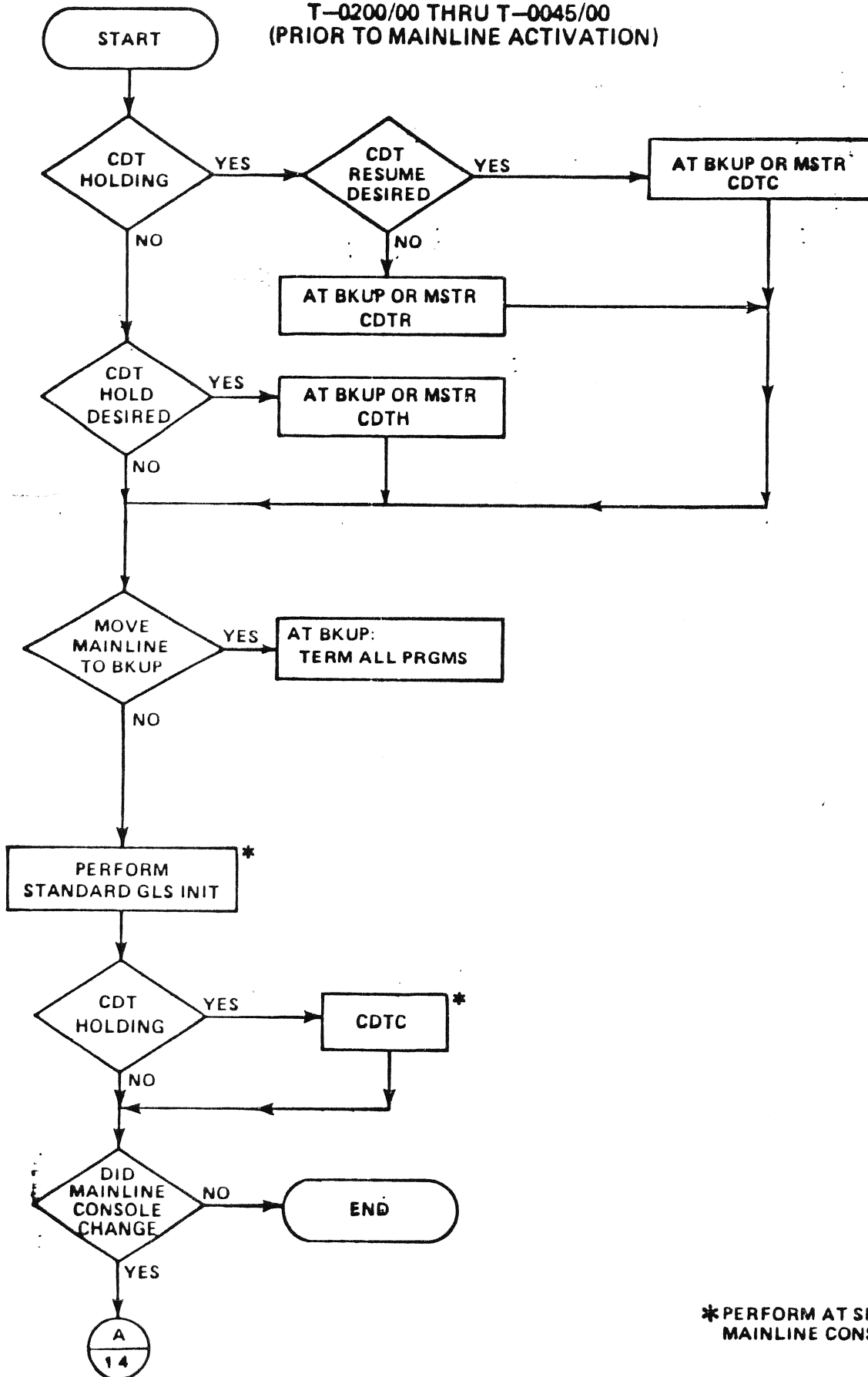
✱ REQUIRES INTG IN GO.  
 NOT NEEDED IF RUN  
 IS FROM BKUP

INTEGRATION CRASH RECOVERY  
T-0500/00 THRU T-0200/00  
(PRIOR TO START OF GLS INIT)



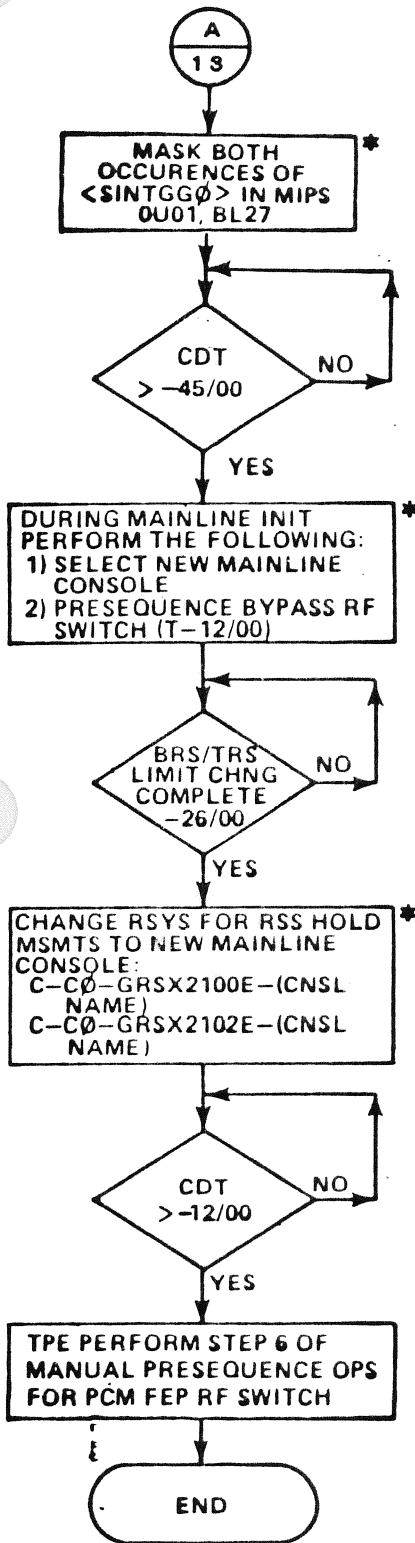
\* REQUIRES INTG IN GO  
(ALSO CAN BE DONE FROM BKUP)

INTEGRATION CRASH RECOVERY  
 T-0200/00 THRU T-0045/00  
 (PRIOR TO MAINLINE ACTIVATION)



\*PERFORM AT SELECTED MAINLINE MAINLINE CONSOLE

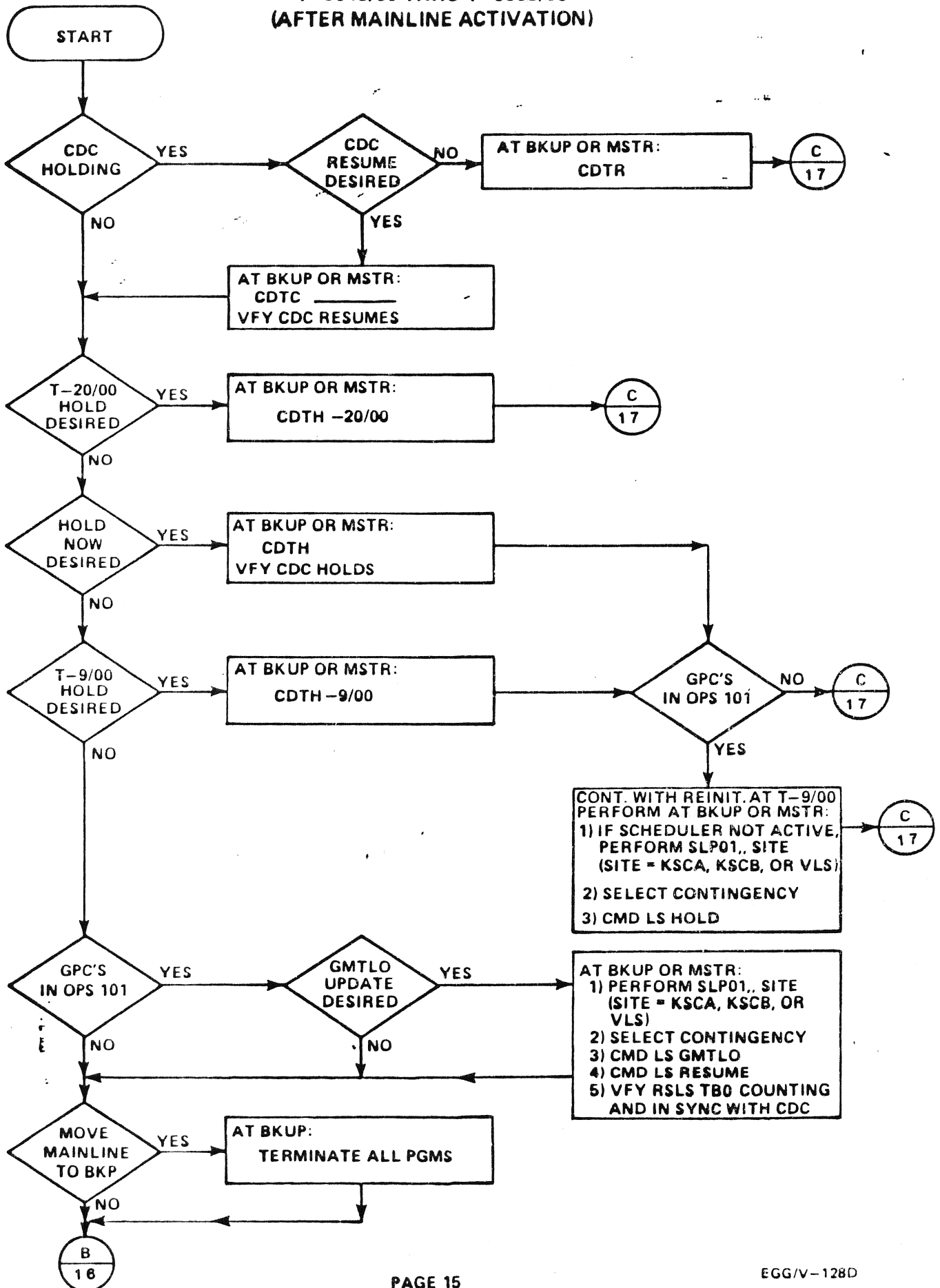
INTEGRATION CRASH RECOVERY  
T-0200/00 THRU T-0045/00  
(PRIOR TO MAINLINE ACTIVATION)  
(Continued)



\* PERFORM AT SELECTED MAINLINE  
MAINLINE CONSOLE



**INTEGRATION CRASH RECOVERY  
T-0045/00 THRU T-0009/00  
(AFTER MAINLINE ACTIVATION)**



INTEGRATION CRASH RECOVERY  
 T-0045/00 THRU T-0009/00  
 (AFTER MAINLINE ACTIVATION)

B  
15

SET:  
 N 03IS 015E = OFF (ML ACTIVE)  
 N 03IS 011E = OFF (HOLDING)  
 N 03IS 048E = ON (MANUAL HOLD)  
 N 03IS 047E = OFF (D1 ACTIVE)

1) PERFORM SLP03  
 2) ENTER SITE (SITE = KSCA, KSCB, OR VLS) XMIT RESP  
 3) CALL SLP07 SUBLEVEL TO SLP01

VERIFY/  
 RELOAD  
 MAINLINE  
 DISK FILES

DID CCM  
 CONSOLE  
 CHANGE

1) SELECT CCM CONSOLE  
 2) ACTIVATE DUAL NOTIF.  
 3) VFY 4 CONCURRENCES IN MSTR CNSL  
 4) PERFORM LIP 1  
 5) ENTER LOX TERM REPL TIME \_\_\_\_\_  
 6) PERFORM LIP2  
 7) PERFORM GLS LIMIT CHANGE FOR ALL SYS

CDT  
 > -26/00

1) PERFORM BRS LIMIT CHANGE  
 2) PERFORM TRS LIMIT CHANGE

VERIFY/RESELECT  
 1) SINGLE SHOT SELECT OPT  
 2) SINGLE SHOT MASKS

NOTE: MAY NOT PERFORM IF TIME CRITICAL

1) INITIATE MAINLINE (GLP07)  
 2) SELECT MAINLINE CONSOLE  
 3) SELECT PRESEQUENCE MESSAGES PER TPE CHKLST T AND PROCEED  
 4) VERIFY SGP02 ACTIVE  
 5) VERIFY SGPR2 ACTIVE

D

D  
-

VERIFY MIP AND LIP:  
 1) ALL FAIL DISPLAY  
 2) ALL MASK DISPLAY

NOTE: MAY NOT PERFORM IF TIME CRITICAL

DID MAINLINE  
 CONSOLE  
 CHANGE

MASK BOTH OCCURENCES OF <SINTGG0> IN MIPS 0U0I, BL27

CHANGE RSYS FOR RSS HOLD MSMTS TO NEW MAINLINE CONSOLE:  
 C-C0-GRSX2100E- (CNSL NAME)  
 C-C0-GRSX2102E- (CNSL NAME)

CDT  
 > -20/00

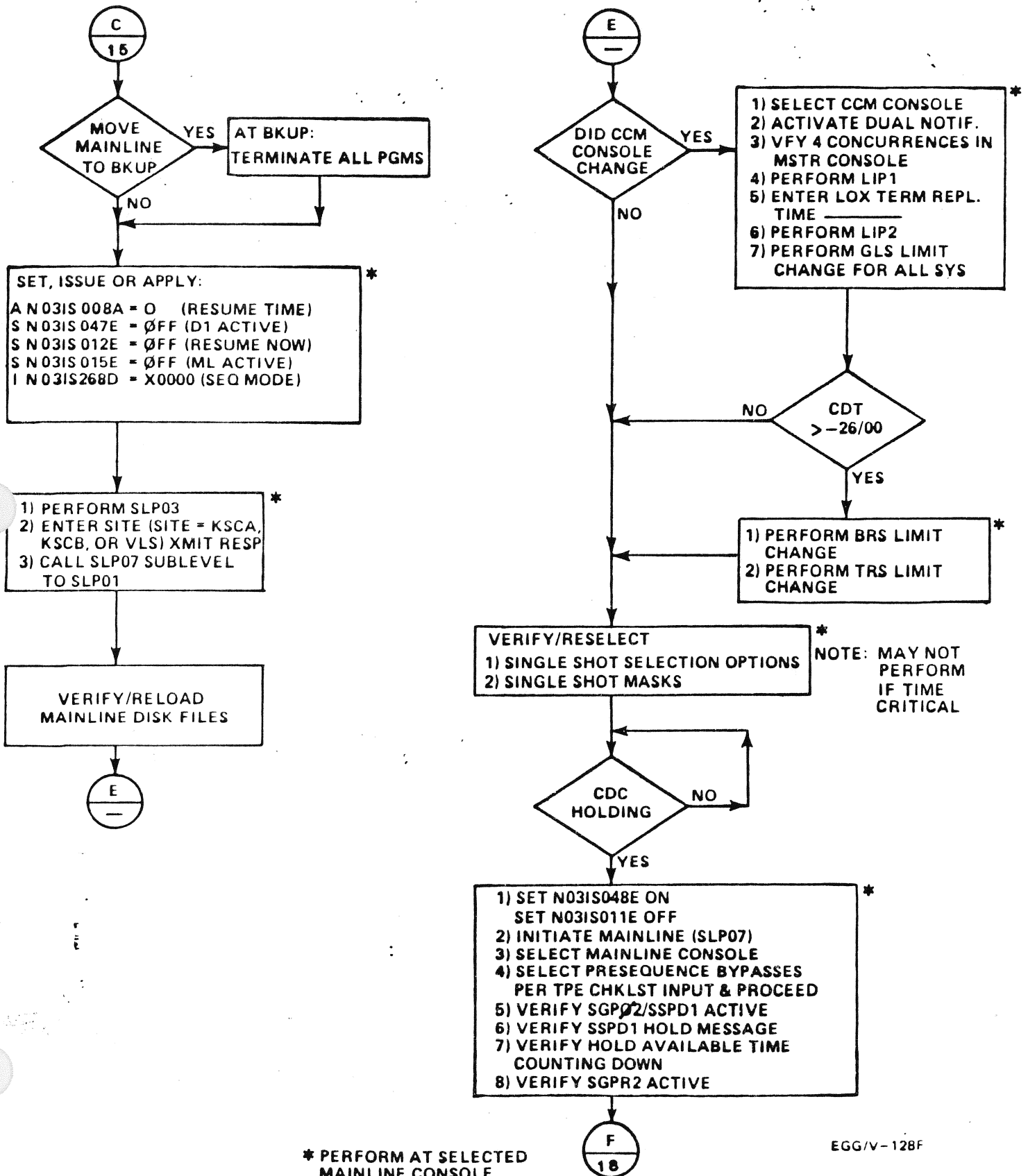
1) VERIFY GLS ENTERS T-20/00 HOLD  
 2) VERIFY SSPD1 ACTIVE  
 3) VERIFY SSPD1 HOLD MESSAGE  
 4) VERIFY HOLD AVAILABLE TIME IS COUNTING DOWN

1) VERIFY GLS ENTERS T-9/00 HOLD  
 2) VERIFY SSPD1 ACTIVE  
 3) VERIFY SSPD1 HOLD MESSAGE  
 4) VERIFY RSLs TBO HOLDING  
 5) VERIFY HOLD AVAILABLE TIME IS COUNTING DOWN  
 6) VERIFY RSYS FOR RSS HOLD MSMTS- MAINLINE CONSOLE

END

\* PERFORM AT SELECTED MAINLINE CONSOLE

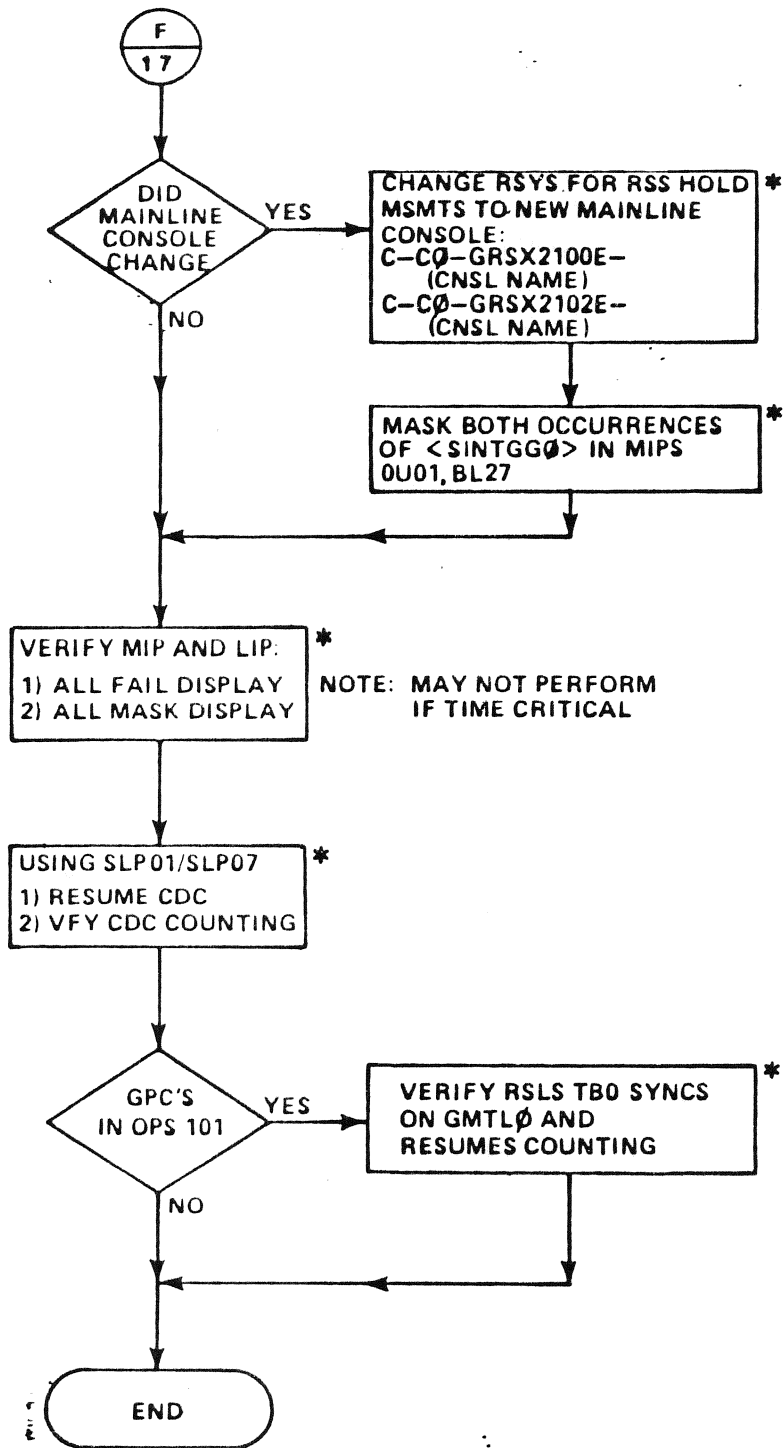
**INTEGRATION CRASH RECOVERY**  
**T-0045/00 THRU T-0009/00**  
**(AFTER MAINLINE ACTIVATION)**



\* PERFORM AT SELECTED  
MAINLINE CONSOLE

EGG/V-128F

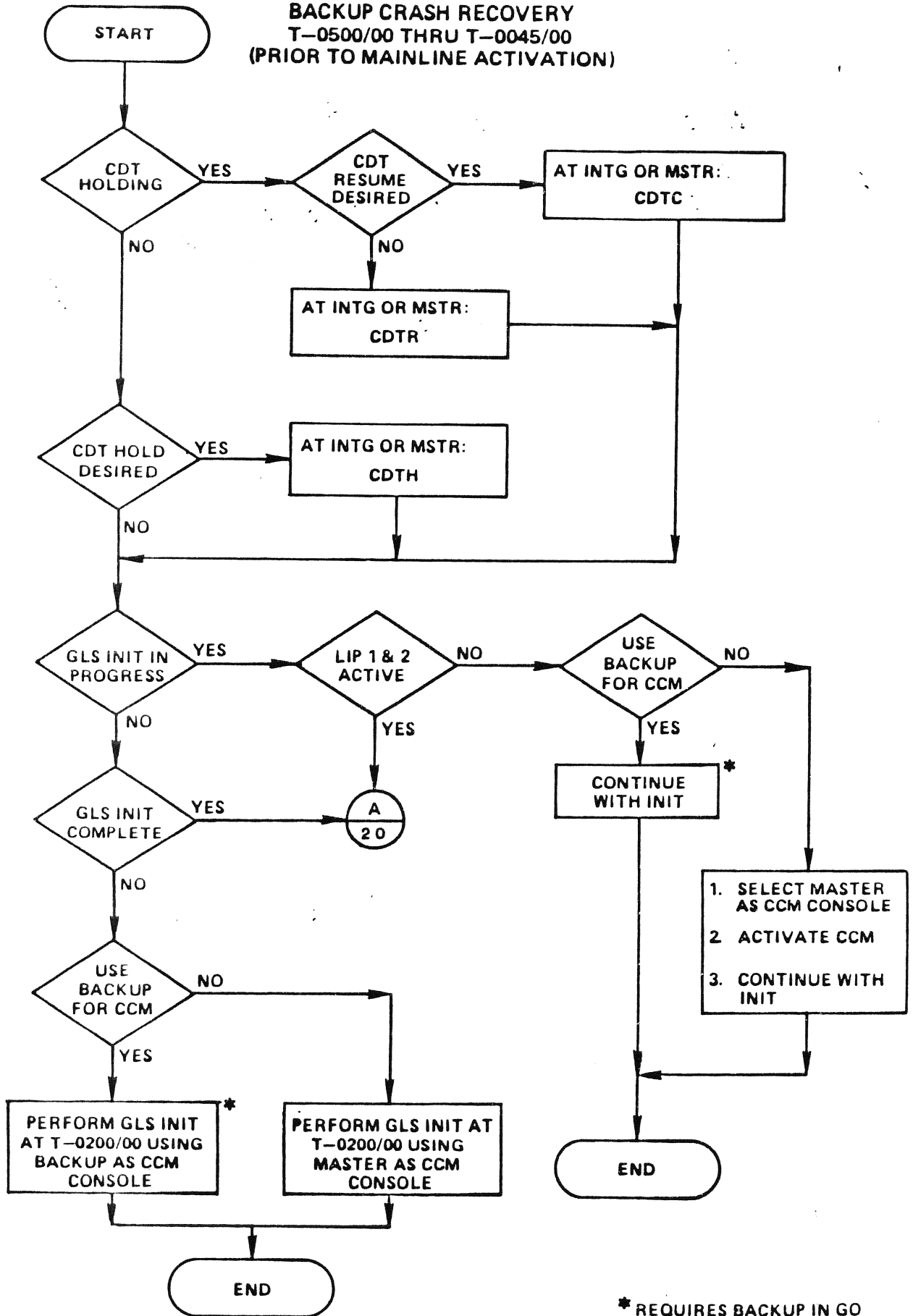
INTEGRATION CRASH RECOVERY  
 T-0045/00 THRU T-0009/00  
 (AFTER MAINLINE ACTIVATION)



NOTE: MAY NOT PERFORM IF TIME CRITICAL

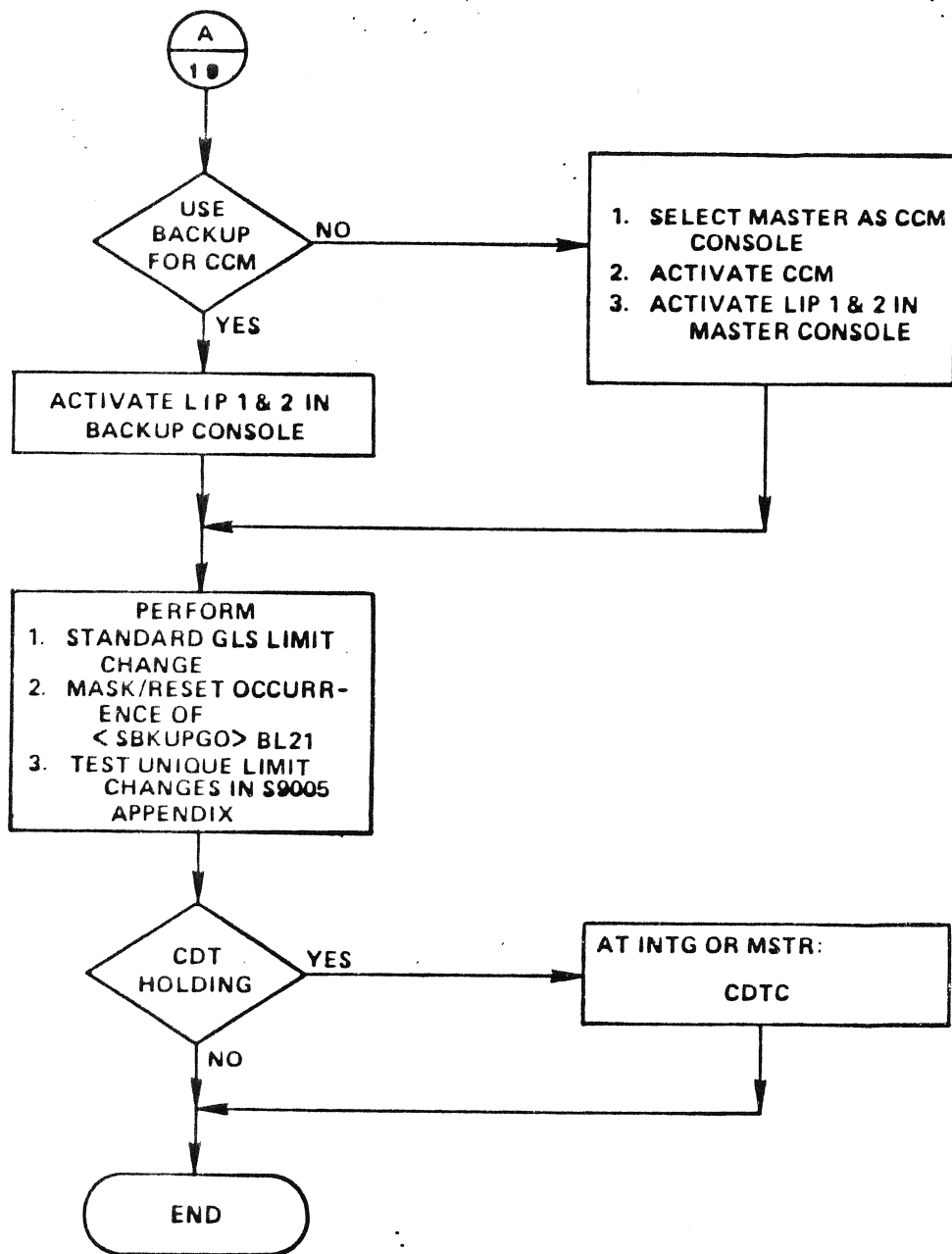
\* PERFORM AT SELECTED MAINLINE CONSOLE

**BACKUP CRASH RECOVERY  
T-0500/00 THRU T-0045/00  
(PRIOR TO MAINLINE ACTIVATION)**



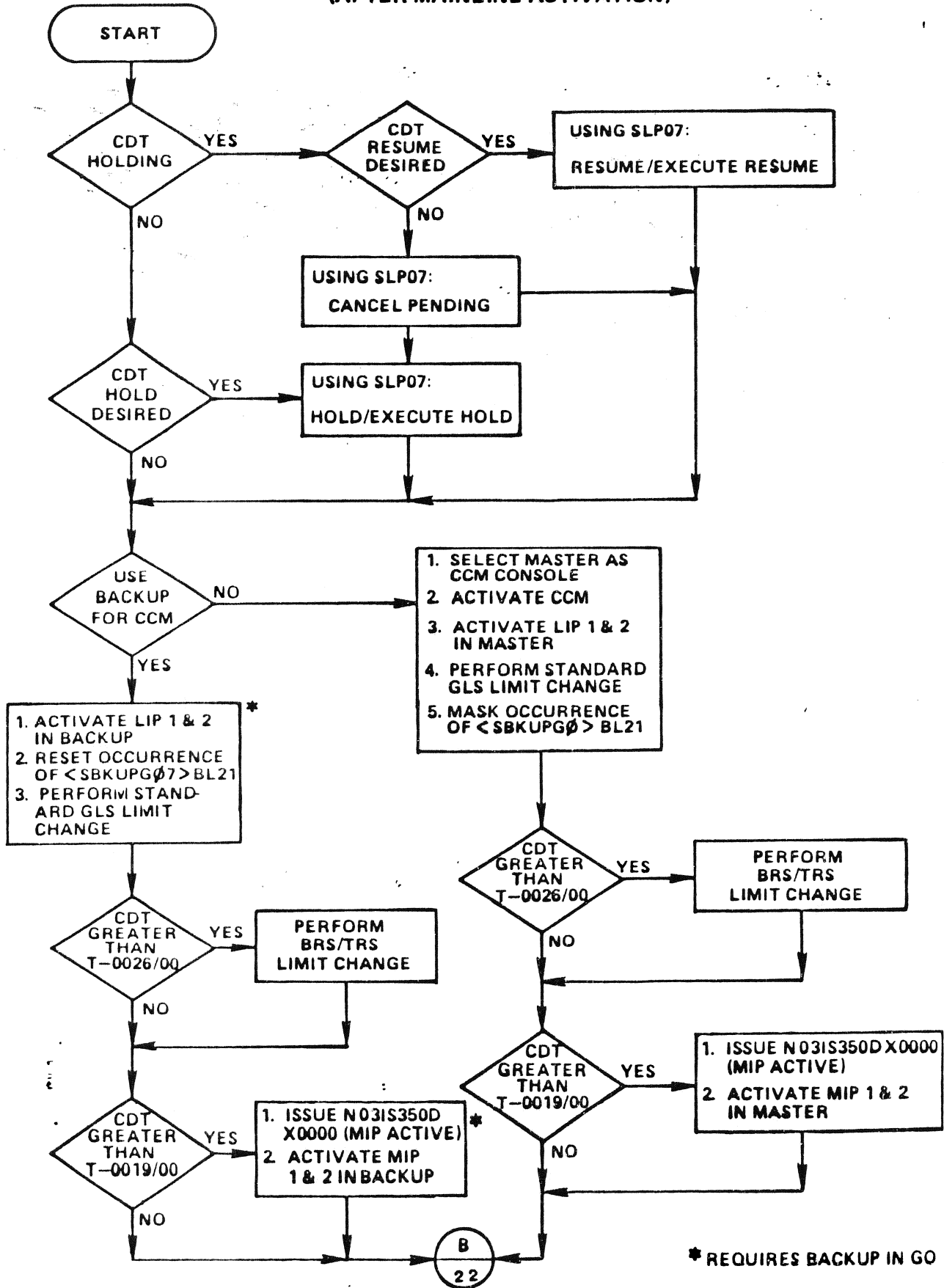
\* REQUIRES BACKUP IN GO

BACKUP CRASH RECOVERY  
T-0500/00 THRU T-0045/00  
(PRIOR TO MAINLINE ACTIVATION)



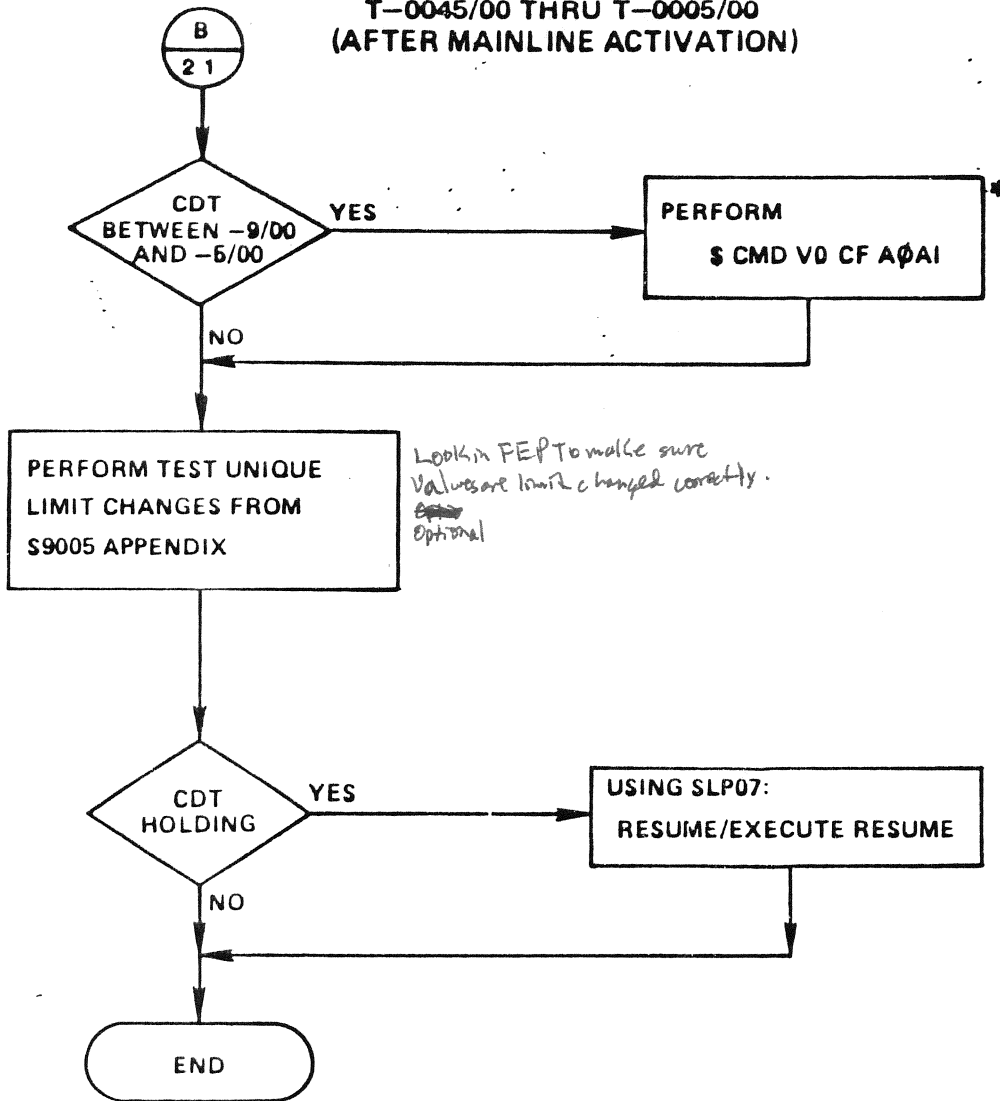
REQUIRES BACKUP IN GO

**BACKUP CRASH RECOVERY  
T-0045/00 THRU T-0005/00  
(AFTER MAINLINE ACTIVATION)**



\* REQUIRES BACKUP IN GO

**BACKUP CRASH RECOVERY  
T-0045/00 THRU T-0005/00  
(AFTER MAINLINE ACTIVATION)**



**\* CONTENTS OF CMD FILE AØAI ARE:**

A GX GSAX7626E,ON  
 A GX GSAX7621E,ON  
 A GX GSAX7636E,OFF  
 A GX GSAX7631E,OFF  
 A GX V46T0154A1,LOW,310  
 A GX V46T0150A1,LOW,280  
 A GX V46T0254A1,LOW,310  
 A GX V46T0250A1,LOW,280  
 A GX V46T0354A1,LOW,310  
 A GX V46T0350A1,LOW,280

AND CAN BE PERFORMED BY CMD PROCESSOR IN  
 THE EVENT AØAI IS INVALID OR NOT LOADED AT  
 CONSOLE



# INTEGRATION CRASH RECOVERY MANUAL PRESEQUENCE OPERATION

## TPE CHECKLIST

<u>STEP</u>	<u>CDT</u>	<u>EVENT</u>	<u>ACTION</u>		
1	-2H30M	STANDBY PCM FEPS TO RF	TPE	LPS 127	CONFIGURE FEP'S OIS AND GPCS TO RF AND REPORT COMPLETION
<u>NOTE:</u> SOURCE = 2, RATE = HI, VOICE = YES					
2	-22M00S	PASS/BFS ONE-SHOT DATA TRANSFER	TPE	DPS 2T2	MANUALLY INITIATE THE PASS/BFS ONE-SHOT DATA TRANSFER AND REPORT COMPLETION
3	-19M59S	PASS OPS 101 TRANSITION	TPE	DPS 212	MANUALLY INITIATE THE PASS OPS 101 TRANSITION AND REPORT COMPLETION
4	-19M00S	GPC DUMP AND COMPARE	TPE	DPS 212	MANUALLY INITIATE THE GPC DUMP AND COMPARE AND REPORT COMPLETION
5	-19M00S	HPU GG HEATER CONTROL LOGIC ACTIVATION	TPE	CBHY 232	MANUALLY ACTIVATE HPU GG HEATER TEMP REACTIVE CONTROL LOGIC WITH LIMITS OF LOW = 200 AND HIGH = 220 AND REPORT COMPLETION
6	-12M00S	ACTIVE PCM FEPS TO RF PENDING	TPE	LPS 127	CONFIGURE FEPS OIA, GPCA, ME1, ME2 AND ME3 TO PENDING RF

NOTES: FOR ALL PENDING SOURCE = 2, PENDING RATE = HI FOR GPCA, OIA PENDING VOICE = YES

THIS STEP MUST BE PERFORMED BY LPS BECAUSE NON GOAL PROGRAM \$PCMS IS NOT LOADED AT THE BKUP CONSOLE.

LPS LAUNCH COMMIT CRITERIA

FAILURE

VALID

LCCD#	FD	SYSTEM	PG	
4-101	SMSTRGO	MSTR	4-04	To RSLs Start - T-31 secs.
4-102	SINTGGO	INTG	4-05	To SRB Ignition - T-0 secs.
4-103	SBKUPGO	BKUP	4-06	To SRB Ignition - T-0 secs.
4-105	SC12GO	C12	4-07	To RSLs Start - T-31 secs.
4-106	SC3GO	C3	4-08	To RSLs Start - T-31 secs.
4-107	SC4GO	C4	4-09	To RSLs Start - T-31 secs.
4-108		C1	4-10	To GLS Start - T-9 mins.
4-109		C2	4-10	To GLS Start - T-9 mins.
4-110		C5	4-10	To GLS Start - T-9 mins.
4-111		C6	4-10	To GLS Start - T-9 mins.
4-112		C7	4-10	To GLS Start - T-9 mins.
4-113		C8	4-10	To GLS Start - T-9 mins.
4-114		C9	4-10	To GLS Start - T-9 mins.
4-115		C10	4-10	To GLS Start - T-9 mins.
4-104		C11	4-10	To GLS Start - T-9 mins.
4-116		CDBFR	4-11	To SRB Ignition - T-0 secs.
4-117	SLDBADTAV	LDBA/S	4-12	To go for SSME Ignition - T-10 secs. (1 of 2)
4-118	SGPCAREAI	GPCA/S	4-13	To SRB Ignition - T-0 secs.(1 of 2)
120	SOIADATAV	OIA/S	4-14	To SRB Ignition - T-0 secs.(1 of 2)
26	SGS1ADATAV	GS1A/S	4-15	To SRB Ignition - T-0 secs.(1 of 2)
4-127	SGS2ADATAV	GS2A/S	4-16	To SRB Ignition - T-0 secs.(1 of 2)
4-131	SPDRGO	PDR/SPA	4-17	To RSLs Start - T-31 secs.
4-132	STCG1DATAV	TCG1	4-18	To RSLs Start - T-31 secs.
4-132	STCG2DATAV	TCG2	4-18	To RSLs Start - T-31 secs.

## NOTE

1. When reporting violation to LTD, LPS must identify as to whether violation is Non-LCC or LCC violation. If violation is LCC, then must report LCCD page number and LCCD failure number.
2. OIS protocol (handshaking), will not be observed when reporting violation. State problem followed by LCCD# and page if applicable.

LPS LAUNCH COMMIT CRITERIA  
T-5 hrs to T-31 secs.

FAILURE

CALL ON CH 232/CH 212 AFTER T-9 MIN.

GPCA/S, OIA/S

A. Single Failure

LTD - LPS - \_\_\_\_\_ has failed.  
Redundant switch has occurred.  
This is not a LCC violation.

B. Both Active & Standby fail

LTD - LPS - \_\_\_\_\_ FEP's or  
\_\_\_\_\_ FEP's have failed.  
This is an LCC violation.  
LCCD# \_\_\_\_\_, Pg. \_\_\_\_\_.  
Recommend hold countdown clock.

TCG 1/2

A. Single failure with R.S.

LTD - LPS - TCG1 has failed. Redundant  
switch has occurred. Issue TCG  
(TCG1 or TCG2) C IC out CMD.  
This is a Non-LCC violation.

B. Both fail

LTD - LPS - Both TCG's have failed.  
Recommend hold countdown clock.  
This is an LCC violation.  
LCCD# 4-132, Pg. 4-18.  
(GLS will hold at next milestone)

ME1, 2, 3, UPLK

LTD - LPS - \_\_\_\_\_ FEP has failed.  
This is not a LCC violation.

LPS LAUNCH COMMIT CRITERIA

T-5 hrs to T-31 secs.

FAILURE

CALL ON CH 232/CH 212 AFTER T-9 MIN.

PDR/SPA

A. Single Failure & R.S.

LTD - LPS - The PDR has failed. Redundant switch has occurred. This is not a LCC violation.

B. Both PDR and SPA failed

LTD - LPS - The PDR and SPA have failed. Recommend hold count-down clock. This is a LCC violation. LCCD# 4-131, Pg. 4-17

INTEGRATION CONSOLE

LTD - LPS - The Integration Console has failed. This is a LCC violation. LCCD# 4-102, Pg. 4-05

Note: GLS safing (SLPPI) initiated after T-9 minutes.

BACKUP CONSOLE

LTD - LPS - The Backup Console has failed. This is an LCC violation. LCCD# 4-103, Pg. 4-06

MASTER CONSOLE

LTD - LPS - The Master Console has failed. This is a LCC violation. LCCD# 4-101, Pg. 4-04. (LPS/CIMC move to Integration Console Position A-1). Bring up SLPPI at BKUP (TCB assignment per SPE, discretion.)

ALL OTHER CONSOLES

C-1 thru C-12

LTD - LPS - C - \_\_\_\_\_ has failed. This is a LCC violation LCCD# \_\_\_\_\_, Pg. \_\_\_\_\_.

LDBA/S

A. Single failure with R.S.

LTD - LPS - LDBA has failed. Redundant switch has occurred. This is not a LCC violation. Have CTPE Reconfigure CMD enable switch.

B. Both fail

LTD - LPS - Both LDB FEP's have failed. This is an LCC violation. LCCD# 4-117, Pg. 4-12. Recommend hold countdown clock.

GS1A/S & GS2A/S

A. Single failure with R.S.

LTD - LPS - GS\_A has failed. Redundant switch has occurred. This is not a LCC violation

Both Active & Standby fail

LTD - LPS - GSE FEP's \_\_\_\_\_ have failed. This is a LCC violation. LCCD# \_\_\_\_\_, Pg. \_\_\_\_\_. Recommend hold countdown clock.

LPS LAUNCH COMMIT CRITERIA  
T-31 secs. to T-0 secs.

FAILURE

CALL ON CH 212

PDR/SPA

No Call (Either one or Both)

INTEGRATION CONSOLE

LTD - LPS - The Integration Console has failed. This is a LCC violation. LCCD# 4-102, Pg. 4-05. Verify GLS safing sequences initiated (SLPP1).

MASTER CONSOLE  
(If time allows)

LTD - LPS - Master Console has failed. Bring up \$SLPP1 at BKUP. This is not a LCC violation. (TCB assignment per SPE discretion.)

BACKUP CONSOLE

LTD - LPS - Backup Console has failed. This is an LCC violation. LCCD# 4-103, Pg. 4-06.

ALL OTHER CONSOLES

No Call

LDBA/S

Single failure & R.S.  
Both fail

No Call

LTD - LPS - CGLS-LDBA and LDBS have failed. This is a LCC violation. LCCD# 4-117, Pg. 4-12.

NOTE: If both LDB FEP's fail - Integration will perform safing with hardware vrs PFP switches).

GS1A/S & GS2A/S

A. Single failure with R.S.  
B. Both Active & Standby fail  
(Either link)

No Call

LTD - LPS - CGLS - GS- \_\_\_\_\_ active and standby have failed. This is a LCC violation. LCCD# \_\_\_\_\_, Pg. \_\_\_\_\_.

GPCA/S, OIA/S

A. Single failure  
B. Both Active & Standby

No Call

LTD - LPS - CGLS - \_\_\_\_\_ active and standby FEP's have failed. This is an LCC violation. LCCD# \_\_\_\_\_, Pg. \_\_\_\_\_.

STS-33 OMI S0007

LPS LAUNCH COMMIT CRITERIA  
T-31 secs. to T-0 secs.

FAILURE

CALL ON CH 212

TCG 1/2

A. Single failure

No Call

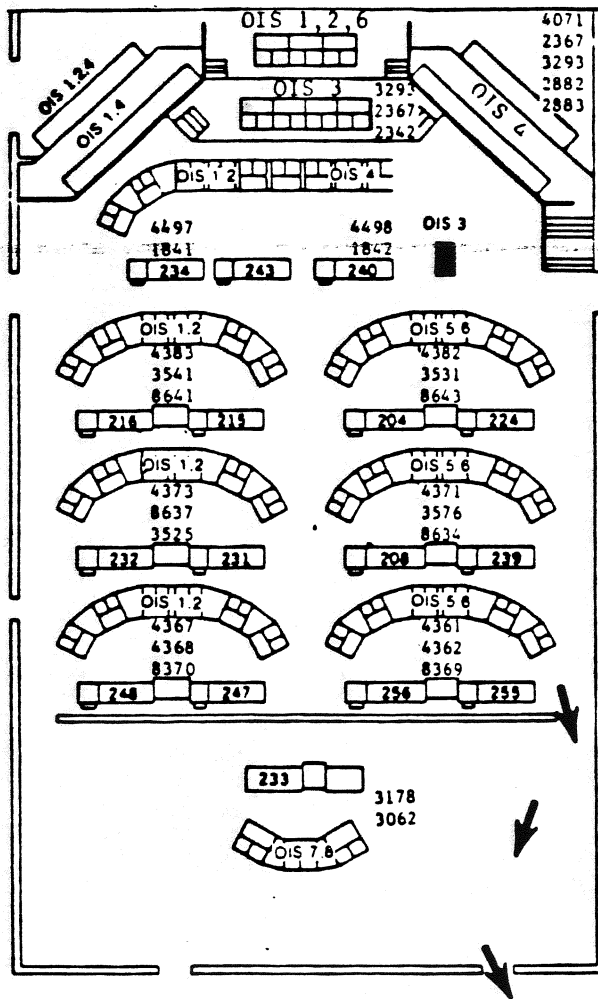
Issue TCG number (TCG1 or TCG2)  
C IC out command.

~~B. Both fail~~

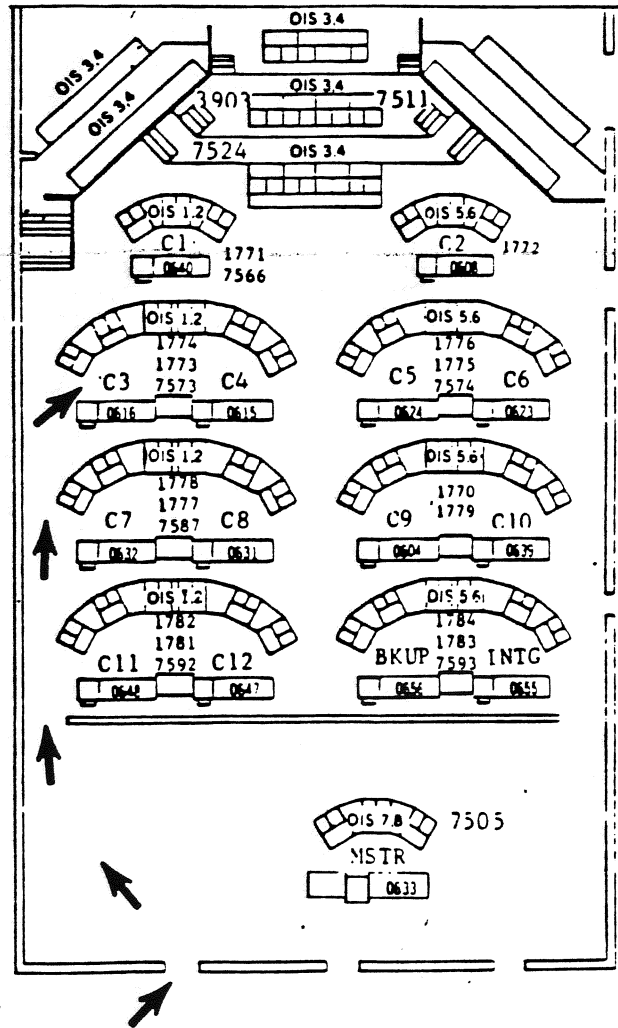
~~LPS ANNOUNCE: Countdown Clocks not  
updating - Time Code Generator  
Failure.~~

NOTE: Integration Console will run on  
Internal Time and GLS will  
continue to sequence.  
LTD will give verbal countdown to  
T-Zero, utilizing Stopwatch, on  
command channel.

## FR-2 Standard Configuration



## FR-3 Standard Configuration



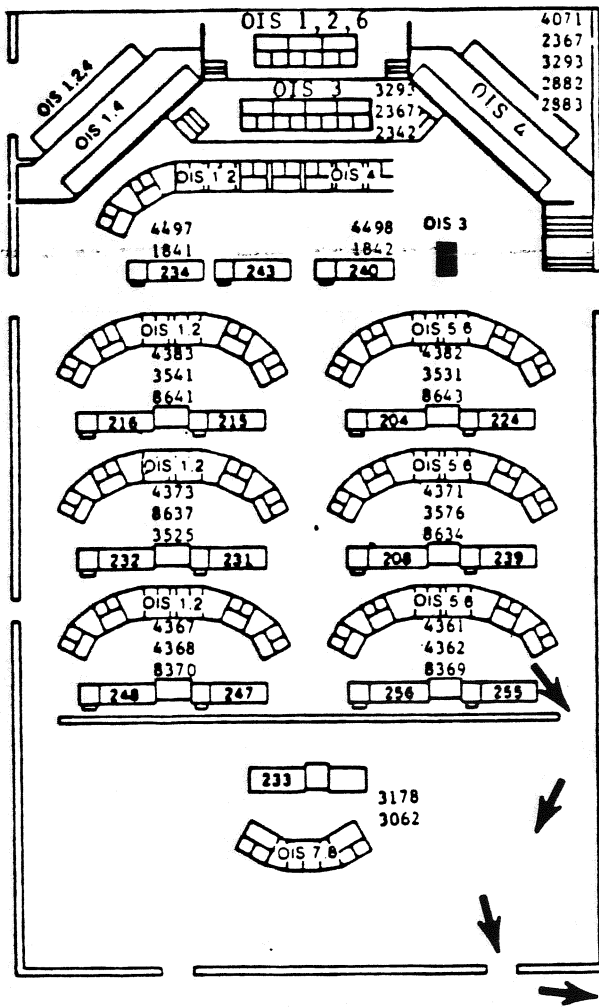
RETURN TO CONSOLE 0616-C3-LOX-AFTER REPAIRS

INCLUDING RELOAD OF SOFTWARE (1 HOUR)  
WITHOUT RELOAD OF SOFTWARE (20 MINUTES)

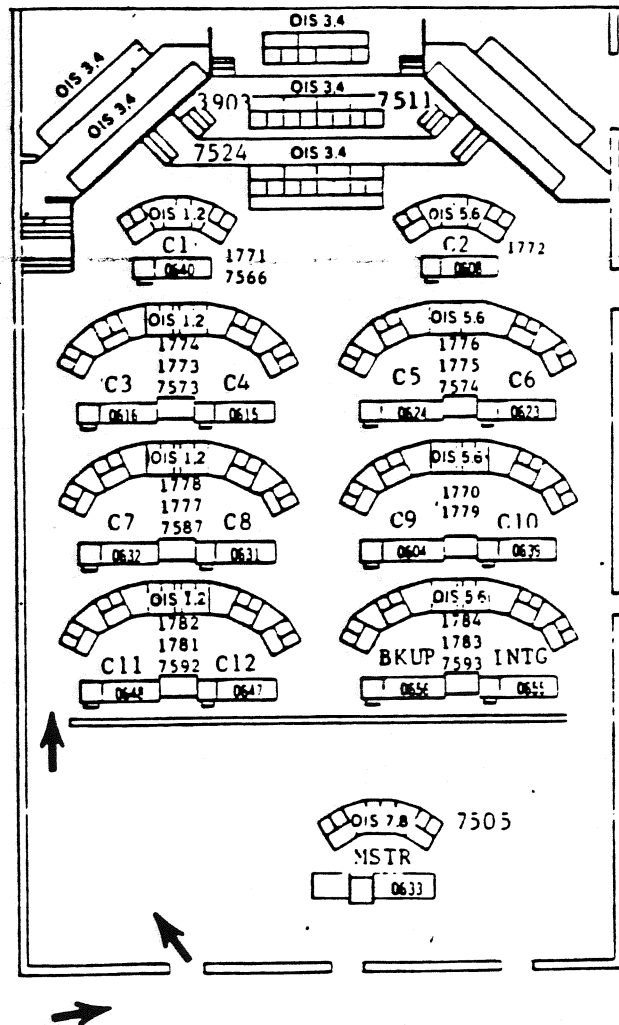
1. THE FOLLOWING PERSONNEL WILL RELOCATE:  
CLOX MOVES TO H/W 0616 - C3/LOX
2. CLOX AT CONSOLE 0616 PERFORM GAL01 -  
REINITIATE FROM REVERT (SAFING) PER S1003.  
(15 MINUTES)

TOTAL TIME = 30 MINUTES OR  
1 HOUR  
15 MINUTES

## FR-2 Standard Configuration



## FR-3 Standard Configuration



RETURN TO CONSOLE 06XX-C(X) AFTER REPAIRS

INCLUDING RELOAD OF SOFTWARE (1 HOUR)  
WITHOUT RELOAD OF SOFTWARE (20 MINUTES)

1. THE FOLLOWING PERSONNEL WILL RELOCATE:

\_\_\_\_\_ MOVED TO H/W \_\_\_\_\_ - C\_

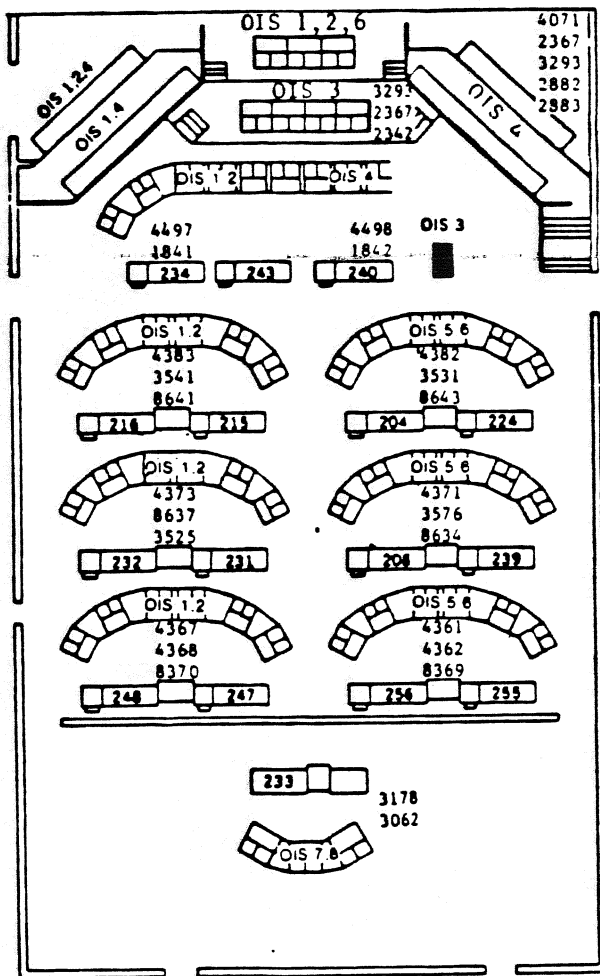
2. : \_\_\_\_\_ AT CONSOLE \_\_\_\_\_ PERFORM \_\_\_\_\_ (5 MINUTES)

TOTAL TIME = 25 MINUTES  
1 HOUR

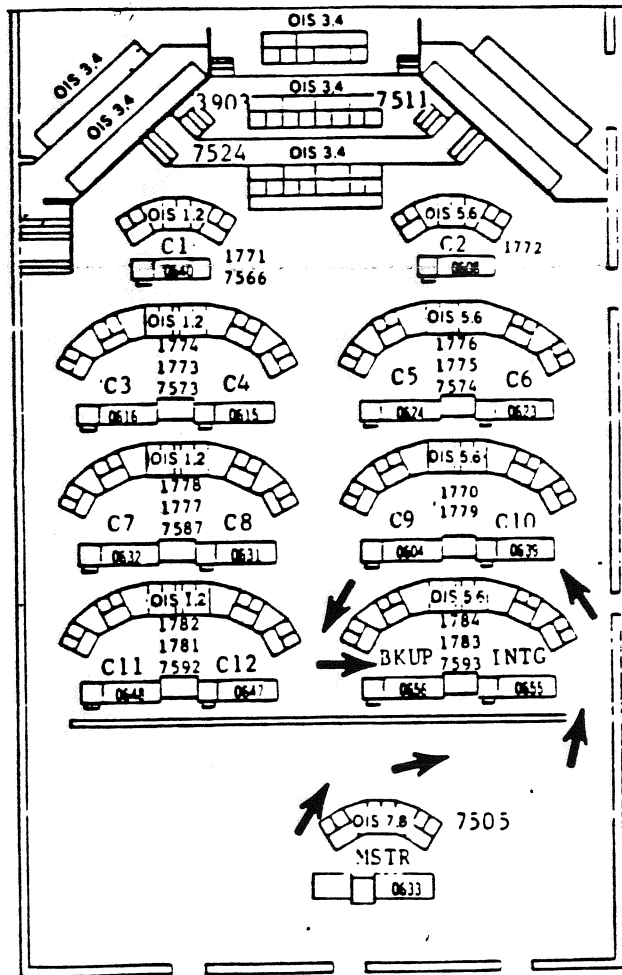
- NOTE: 1. S0007 UTILIZES CONSOLE 0255 AS C3 HOT SPARE.
2. CONSOLE 0255 MAY BE USED AS A UTILITY HOT SPARE WITH SPE CONCURRENCE.



## FR-2 Standard Configuration



## FR-3 Standard Configuration



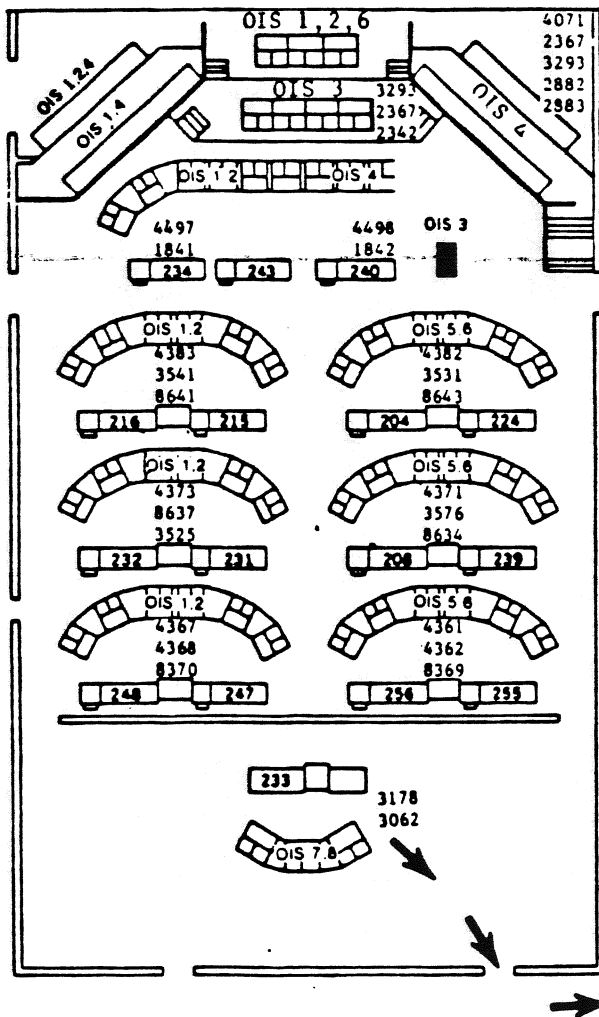
RETURN TO CONSOLE 0656-BKUP AFTER REPAIRS OPTION 1

INCLUDING RELOAD OF SOFTWARE (1 HOUR)  
WITHOUT RELOAD OF SOFTWARE (20 MINUTES)

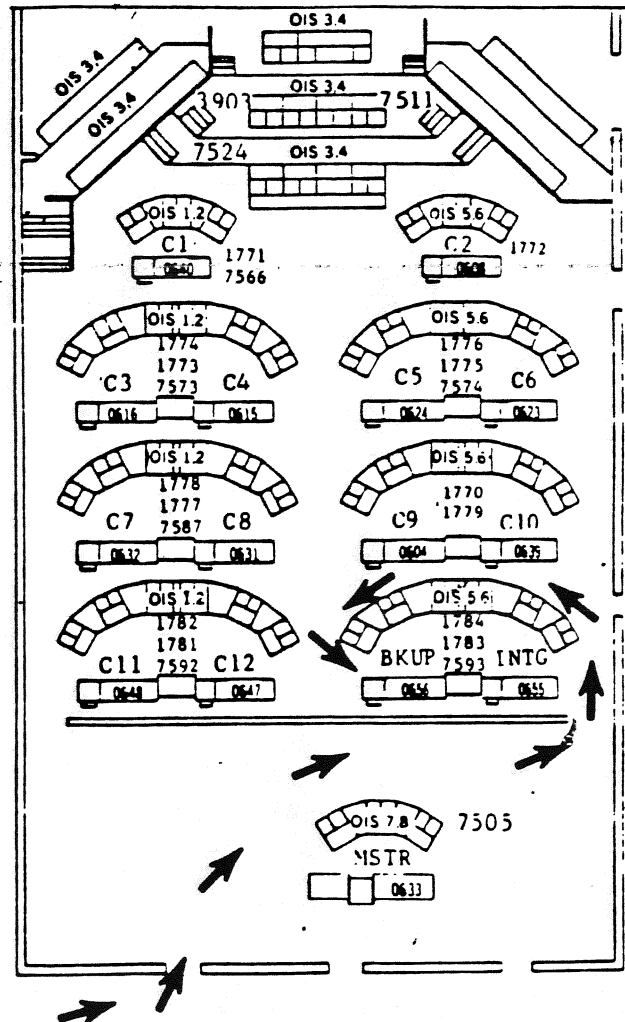
1. THE FOLLOWING PERSONNEL RELOCATE:  
CGLS/CTPE MOVES TO H/W 0656 - INTG

TOTAL TIME = 1 HOUR OR  
20 MINUTES

## FR-2 Standard Configuration



## FR-3 Standard Configuration



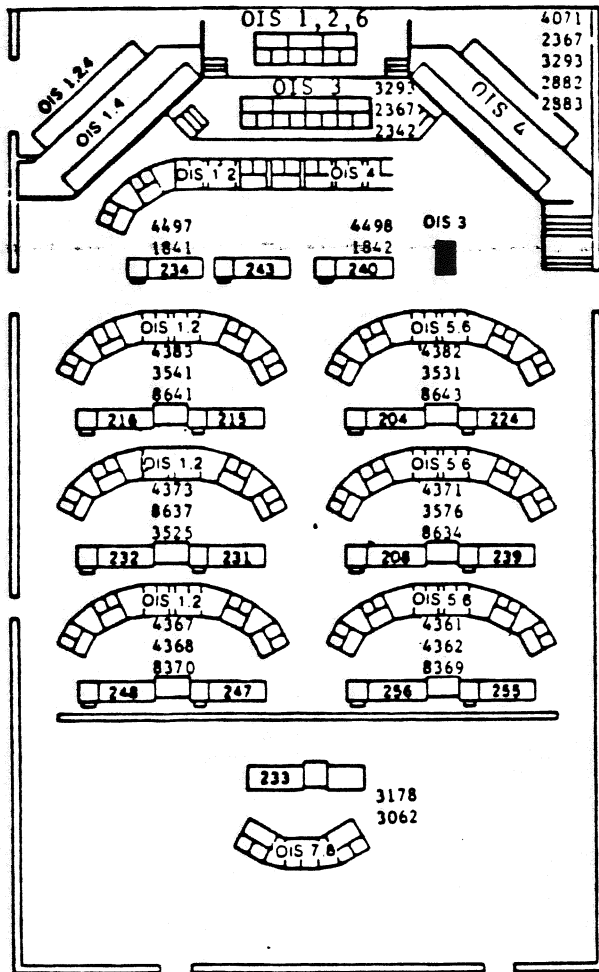
RETURN TO CONSOLE 0656-BKUP AFTER REPAIRS OPTION 2

INCLUDING RELOAD OF SOFTWARE (1 HOUR)  
WITHOUT RELOAD OF SOFTWARE (20 MINUTES)

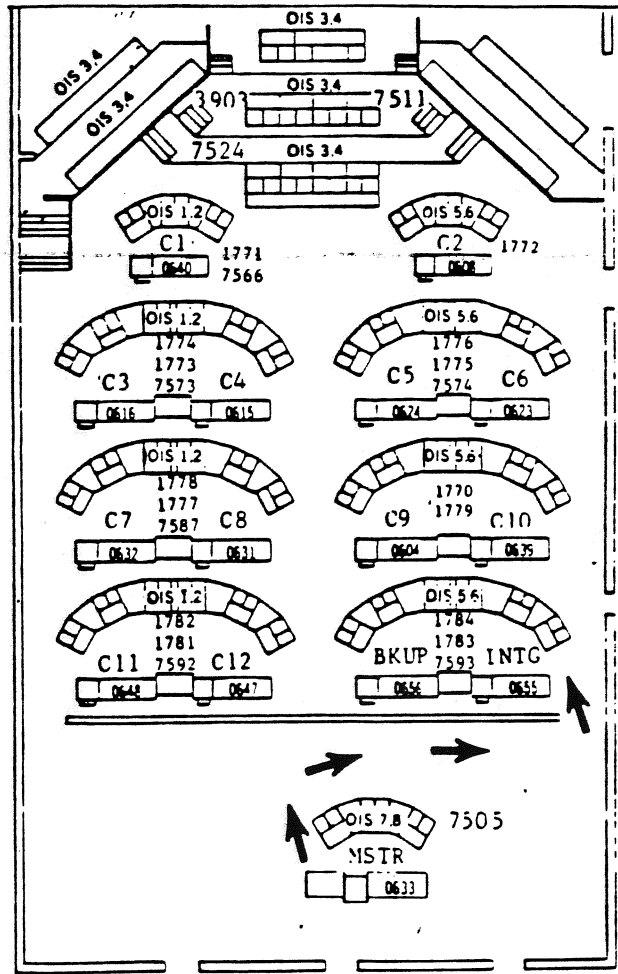
1. THE FOLLOWING PERSONNEL RELOCATE:  
CGLS/CTPE MOVES TO H/W 0656 - INTG
2. LPS
  - ° \$TERM BKUP (H/W 0233)
  - ° \$BMAP BKUP (H/W 0656)
  - ° SET PWA LIMITS IN CDBFR 0650 FOR H/W 0656 - BKUP
  - ° CHANGE PHYSICAL PORT FOR H/W 0656 - BKUP
  - ° \$CLAI BKUP
  - ° \$BMAP MSTR (H/W 0233)

TOTAL TIME = 1 HOUR OR  
20 MINUTES

## FR-2 Standard Configuration



## FR-3 Standard Configuration



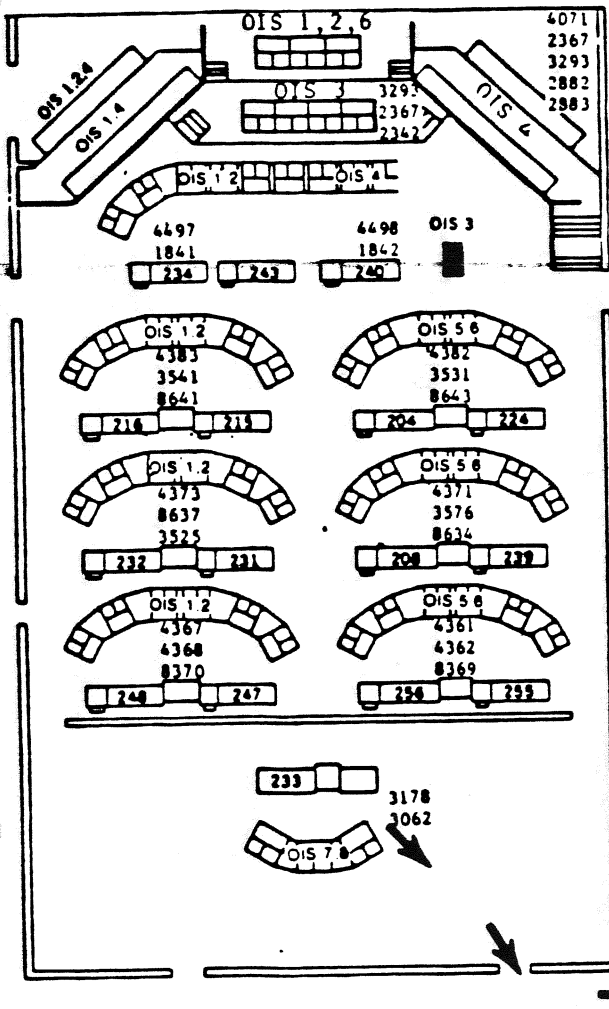
RETURN TO CONSOLE 0655 INTG AFTER REPAIRS

INCLUDING RELOAD OF SOFTWARE (1 HOUR)  
WITHOUT RELOAD OF SOFTWARE (20 MINUTES)

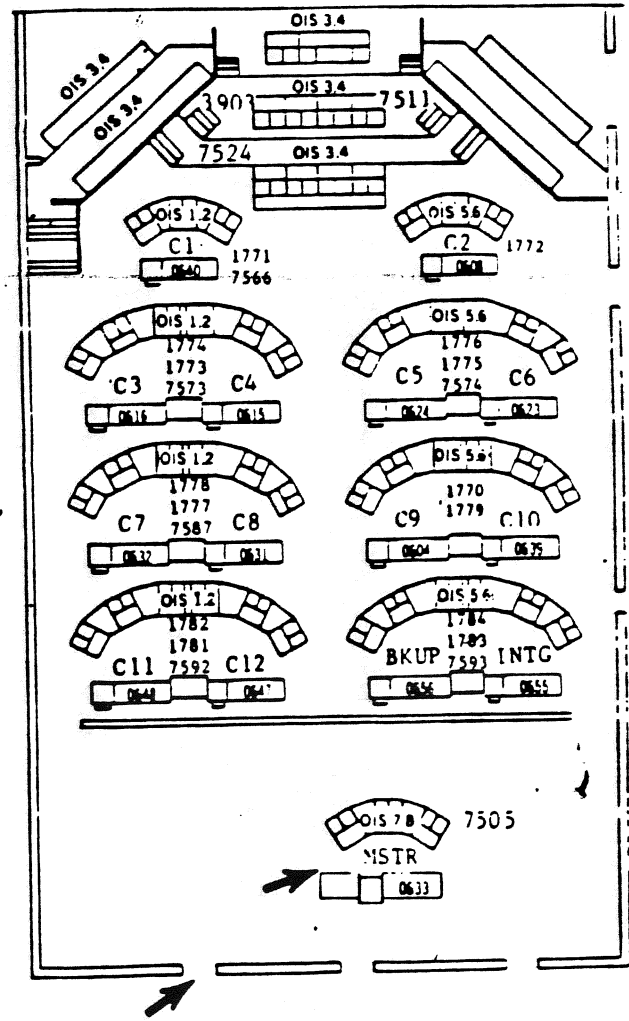
1. THE FOLLOWING PERSONNEL RELOCATE:  
CGLS/CTPE MOVES TO H/W 0656 - BKUP  
INTG MOVES TO H/W 0656 - INTG  
BKUP MOVES TO H/W 0656 - BKUP
2. LPS . \$CLAI INTG

TOTAL TIME = 1 HOUR OR  
20 MINUTES

## FR-2 Standard Configuration



## FR-3 Standard Configuration



RETURN TO CONSOLE 0633 MSTR AFTER REPAIRS

INCLUDING RELOAD OF SOFTWARE (1 HOUR)  
WITHOUT RELOAD OF SOFTWARE (20 MINUTES)

1. LPS RECALL PROGRAMS IN FOLLOWING ORDER:

TCB

1. \$FEPCPR
2. \$FEPCPR
3. AA001
4. \$HWMON
5. AWPO1
6. SLPP1

2. THE FOLLOWING PERSONNEL RELOCATE:

LPS, C3MC, C3SE, C3SM MOVES TO H/W 0633 - MSTR

3. BOOT 0233 STANDALONE (OFF. 650 BUFFER)

TOTAL TIME = 1 HOUR OR  
20 MINUTES

PSUEDO FUNCTION DESIGNATOR CONTROL DOCUMENT

08/28/84

CCMS REV 90893

FD NAME	NOMENCLATURE	TYPE	ODIS	RSYS	OWN BY	SET BY	USE BY	LOC SIG	AUTH
N031S056E	SSME LIMITS AND CONTROL IO GLS DESC: SHOWS WHEN GLS LIMITS AND FD CCM SET.	PD	INTEG	INTEG	INTG	INTG	INTG	K K	:BASELINE
N031S057D	FAILURE ROW 7 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K K	:
N031S057E	GMC LIMITS AND CONTROL IO GLS DESC: SHOWS WHEN GLS LIMITS AND FD CCM SET.	PD	INTEG	INTEG	INTG	INTG	INTG	K K	:BASELINE
N031S058D	FAILURE ROW 8 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K K	:
N031S058E	DFS LIMITS AND CONTROL IO GLS DESC: SHOWS WHEN GLS LIMITS AND FD CCM SET.	PD	INTEG	INTEG	INTG	INTG	INTG	K K	:BASELINE
N031S059D	FAILURE ROW 9 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K K	:
N031S059E	WATER LIMITS AND CONTROL IO GLS DESC: SHOWS WHEN GLS LIMITS AND FD CCM SET.	PD	INTEG	INTEG	INTG	INTG	INTG	K K	:BASELINE
N031S060D	FAILURE ROW 10 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K K	:
N031S060E	BPYRO LIMITS AND CONTROL IO GLS DESC: SHOWS WHEN GLS LIMITS AND FD CCM SET.	PD	INTEG	INTEG	INTG	INTG	INTG	K K	:BASELINE
N031S061D	FAILURE ROW 11 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K K	:
N031S061E	BELEC LIMITS AND CONTROL IO GLS DESC: SHOWS WHEN GLS LIMITS AND FD CCM SET.	PD	INTEG	INTEG	INTG	INTG	INTG	K K	:BASELINE
N031S062D	FAILURE ROW 12 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K K	:
N031S062E	INMSI LIMITS AND CONTROL IO GLS DESC: SHOWS WHEN GLS LIMITS AND FD CCM SET.	PD	INTEG	INTEG	INTG	INTG	INTG	K K	:BASELINE
N031S063D	FAILURE ROW 13 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K K	:
N031S063E	HANMSI LIMITS AND CONTROL IO GLS DESC: SHOWS WHEN GLS LIMITS AND FD CCM SET.	PD	INTEG	INTEG	INTG	INTG	INTG	K K	:BASELINE
N031S064D	FAILURE ROW 14 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K K	:

PSUEDO FUNCTION DESIGNATOR CONTROL DOCUMENT  
 08/25/84

CCNS REV 90893

FD NAME	NOMENCLATURE	TYPE	ODIS	RSYS	OWN BY	SET BY	USE BY	LOC	SIG	AUTH
0315064E	INSIK LIMITS AND CONTROL TO GLS DESC: SHOWS WHEN GLS LIMITS AND FD CCM SET.	PD	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:BASELINE
0315065D	FAILURE ROW 15 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:
0315065E	EGS LIMITS AND CONTROL TO GLS DESC: SHOWS WHEN GLS LIMITS AND FD CCM SET.	PD	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:BASELINE
0315066D	FAILURE ROW 16 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:
0315066E	EGSS LIMITS AND CONTROL TO GLS DESC: SHOWS WHEN GLS LIMITS AND FD CCM SET.	PD	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:BASELINE
0315067D	FAILURE ROW 17 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:
0315067E	PLBD LIMITS AND CONTROL TO GLS DESC: SHOWS WHEN GLS LIMITS AND FD CCM SET.	PD	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:BASELINE
0315068D	FAILURE ROW 18 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:
0315068E	ARMS LIMITS AND CONTROL TO GLS DESC: SHOWS WHEN GLS LIMITS AND FD CCM SET.	PD	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:BASELINE
0315069D	FAILURE ROW 19 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:
0315069E	MPS LIMITS AND CONTROL TO GLS DESC: SHOWS WHEN GLS LIMITS AND FD CCM SET.	PD	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:BASELINE
0315070D	FAILURE ROW 20 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:
0315070E	FCP LIMITS AND CONTROL TO GLS DESC: SHOWS WHEN GLS LIMITS AND FD CCM SET.	PD	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:BASELINE
0315071D	FAILURE ROW 21 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:
0315071E	HRS LIMITS AND CONTROL TO GLS DESC: SHOWS WHEN GLS LIMITS AND FD CCM SET.	PD	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:BASELINE
0315072D	FAILURE ROW 22 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:

PSUEDO FUNCTION DESIGNATOR CONTROL DOCUMENT

06728784

CCMS REV 90893

FD NAME	NOMENCLATURE	TYPE	UDIS	RSYS	OWN BY	SET BY	USE BY	LOC SIG	AUTH
N031S072E	IRS LIMITS AND CONTROL IO GLS DESC: SHOWS WHEN GLS LIMITS AND FD CCM SET.	PD	INTEG	INTEG	INIG	INIG	INIG	K K	:BASELINE
N031S073D	FAILURE ROW 23 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K K	:
N031S073E	EPDC LIMITS AND CONTROL IO GLS DESC: SHOWS WHEN GLS LIMITS AND FD CCM SET.	PD	INTEG	INTEG	INIG	INIG	INIG	K K	:BASELINE
N031S074D	FAILURE ROW 24 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K K	:
N031S074E	PVD LIMITS AND CONTROL IO GLS DESC: SHOWS WHEN GLS LIMITS AND FD CCM SET.	PD	INTEG	INTEG	INIG	INIG	INIG	K K	:BASELINE
N031S075D	FAILURE ROW 25 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K K	:
N031S075E	MECH LIMITS AND CONTROL IO GLS DESC: SHOWS WHEN GLS LIMITS AND FD CCM SET.	PD	INTEG	INTEG	INIG	INIG	INIG	K K	:BASELINE
N031S076D	FAILURE ROW 26 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K K	:
N031S076E	COMM LIMITS AND CONTROL IO GLS DESC: SHOWS WHEN GLS LIMITS AND FD CCM SET.	PD	INTEG	INTEG	INIG	INIG	INIG COMM/NAV	B B	C:BASES
N031S077D	FAILURE ROW 27 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K K	:
N031S077E	NAVAID LIMITS AND CONTROL IO GLS DESC: SHOWS WHEN GLS LIMITS AND FD CCM SET.	PD	INTEG	INTEG	INIG	INIG	INIG	K K	:BASELINE
N031S078D	FAILURE ROW 28 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K K	:
N031S078E	ORBITER AT OPF DESC: SELECTS OPF AS ORBITER TEST SITE	PD	INTEG	INTEG	INTG	INTG	INTG HYOX ECS	B B	C:BASES
N031S079D	FAILURE ROW 29 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K K	:

PSUEDO FUNCTION DESIGNATION CONTROL DOCUMENT

08/28/84

CCMS REV 90893

FD NAME	NOMENCLATURE	TYPE	CDIS	RSYS	OWN BY	SET BY	USE BY	LOC	SIG	AUTH
N031S079E	ORBITER AT VAB DESC: SELECTS VAB AS ORBITER TEST SITE	PD	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:5-20/7
							HYOX ECS EPDC GNC HYKUEL ECLSS			
N031S080D	FAILURE ROW 30 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:BASELINE
N031S080E	ORBITER AT PAD DESC: SELECTS PAD AS ORBITER TEST SITE	PD	INTEG	INTEG	INTEG	INTEG	INTEG	B	B	:BASES
							HYOX ECS EPDC GNC HYFUEL ECLSS			
N031S081D	FAILURE ROW 31 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:
N031S081E	L02 PRE PRESS CYCLE FAIL DESC: GLS *NO GO* FLAGS FOR L02/LH2.	PD	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:
N031S082D	FAILURE ROW 32 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:
N031S082E	LH2 PRE PRESS CYCLE FAIL DESC: GLS *NO GO* FLAGS FOR L02/LH2.	PD	INTEG	INTEG	INTEG	INTEG	INTEG	B	B	:BASES
							LH2			
N031S083D	FAILURE ROW 33 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HLX.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:
N031S083E	APU BYPASS DESC: ML & SINGLE SHOT VERIFY.	PD	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:
N031S084D	FAILURE ROW 34 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:
N031S084E	ARMS BYPASS DESC: ML & SINGLE SHOT VERIFY.	PD	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:BASELINE
N031S085D	FAILURE ROW 35 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:



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N031S085E BELC BYPASS PD INIEG INIEG INIEG INIEG K K :  
 DESC: ML & SINGLE SHOT VERIFY.

N031S086D FAILURE ROW 36 PDP INIEG INIEG INIEG INIEG K K :  
 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.

N031S086E BIRD BYPASS PD INIEG INIEG INIEG INIEG K K :BASELINE  
 DESC: ML & SINGLE SHOT VERIFY.

N031S087D FAILURE ROW 37 PDP INIEG INIEG INIEG INIEG K K :  
 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.

N031S087E BIRD BYPASS PD INIEG INIEG INIEG INIEG K K :  
 DESC: ML & SINGLE SHOT VERIFY.

N031S088D FAILURE ROW 38 PDP INIEG INIEG INIEG INIEG K K :  
 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.

N031S088E BRS BYPASS PD INIEG INIEG INIEG INIEG K K :BASELINE  
 DESC: ML & SINGLE SHOT VERIFY.

N031S089D FAILURE ROW 39 PDP INIEG INIEG INIEG INIEG K K :  
 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.

N031S089E BPRD BYPASS PD INIEG INIEG INIEG INIEG K K :  
 DESC: ML & SINGLE SHOT VERIFY.

N031S090D FAILURE ROW 40 PDP INIEG INIEG INIEG INIEG K K :  
 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.

N031S090E COMM BYPASS PD INIEG INIEG INIEG INIEG K K :BASELINE  
 DESC: ML & SINGLE SHOT VERIFY.

N031S091D FAILURE ROW 41 PDP INIEG INIEG INIEG INIEG K K :  
 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.

N031S091E JPS BYPASS PD INIEG INIEG INIEG INIEG K K :  
 DESC: ML & SINGLE SHOT VERIFY.

N031S092D FAILURE ROW 42 PDP INIEG INIEG INIEG INIEG K K :  
 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.

N031S092E ECLS BYPASS PD INIEG INIEG INIEG INIEG K K :BASELINE  
 DESC: ML & SINGLE SHOT VERIFY.

N031S093D FAILURE ROW 43 PDP INIEG INIEG INIEG INIEG K K :  
 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.

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N031S093E	EPDC BYPASS DESC: ML & SINGLE SHOT VERIFY.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	
N031S094D	FAILURE ROW 44 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATRN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	
N031S094E	FCP BYPASS DESC: ML & SINGLE SHOT VERIFY.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:BASELINE
N031S095D	FAILURE ROW 45 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATRN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	
N031S095E	GNC BYPASS DESC: ML & SINGLE SHOT VERIFY.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	
N031S096D	FAILURE ROW 46 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATRN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	
N031S096E	HYD BYPASS DESC: ML & SINGLE SHOT VERIFY.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:BASELINE
N031S097D	FAILURE ROW 47 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATRN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	
N031S097E	HYEUEL BYPASS DESC: ML & SINGLE SHOT VERIFY.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	
N031S098D	FAILURE ROW 48 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATRN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	
N031S098E	HYOXID BYPASS DESC: ML & SINGLE SHOT VERIFY.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:BASELINE
N031S099D	FAILURE ROW 49 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATRN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	
N031S099E	INSTR BYPASS DESC: ML & SINGLE SHOT VERIFY.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	
N031S100D	FAILURE ROW 50 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATRN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	
N031S100E	INIEG BYPASS DESC: ML & SINGLE SHOT VERIFY.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:BASELINE
N031S101D	VOTING LOGIC ROW 1 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATRN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	

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N031S101E	ECS BYPASS DESC: ML & SINGLE SHOT VERIFY.	PD	INIEG	INIEG	INIG	INIG	INIG	K K	K
N031S102D	VOTING LOGIC ROW 2 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K K	K
N031S102E	LH2 BYPASS DESC: ML & SINGLE SHOT VERIFY.	PD	INIEG	INIEG	INIG	INIG	INIG	K K	:BASELINE
N031S103D	VOTING LOGIC ROW 3 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K K	K
N031S103E	L02 BYPASS DESC: ML & SINGLE SHOT VERIFY.	PD	INIEG	INIEG	INIG	INIG	INIG	K K	K
N031S104D	VOTING LOGIC ROW 4 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K K	K
N031S104E	MECH BYPASS DESC: ML & SINGLE SHOT VERIFY.	PD	INIEG	INIEG	INIG	INIG	INIG	K K	:BASELINE
N031S105D	VOTING LOGIC ROW 5 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K K	K
N031S105E	MPS BYPASS DESC: ML & SINGLE SHOT VERIFY.	PD	INIEG	INIEG	INIG	INIG	INIG	K K	K
N031S106D	VOTING LOGIC ROW 6 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K K	K
N031S106E	NAVAID BYPASS DESC: ML & SINGLE SHOT VERIFY.	PD	INIEG	INIEG	INIG	INIG	INIG	K K	:BASELINE
N031S107D	VOTING LOGIC ROW 7 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K K	K
N031S107E	PLBD BYPASS DESC: ML & SINGLE SHOT VERIFY.	PD	INIEG	INIEG	INIG	INIG	INIG	K K	K
N031S108D	VOTING LOGIC ROW 8 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K K	K
N031S108E	PVD BYPASS DESC: ML & SINGLE SHOT VERIFY.	PD	INIEG	INIEG	INIG	INIG	INIG	K K	:BASELINE
N031S109D	VOTING LOGIC ROW 9 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K K	K

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N031S1109 SSME BYPASS PD INTG INTG INTG K K :  
 DESC: ML & SINGLE SHOT VERIFY.

N031S1110 VOTING LOGIC ROW 10 PDP INTG INTG INTG K K :  
 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.

N031S1111 INST. BYPASS PD INTG INTG INTG K K :  
 DESC: ML & SINGLE SHOT VERIFY.

N031S1112 VOTING LOGIC ROW 11 PDP INTG INTG INTG K K :  
 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.

N031S1113 IRS BYPASS PD INTG INTG INTG K K :  
 DESC: ML & SINGLE SHOT VERIFY.

N031S1114 VOTING LOGIC ROW 12 PDP INTG INTG INTG K K :  
 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.

N031S1115 WATER BYPASS PD INTG INTG INTG K K :  
 DESC: ML & SINGLE SHOT VERIFY.

N031S1116 VOTING LOGIC ROW 13 PDP INTG INTG INTG K K :  
 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.

N031S1117 EOA BYPASS PD INTG INTG INTG K K :  
 DESC: GLS ML & SINGLE SHOT VFY PROCESSING BYPASS FOR SYSTEM'S  
 FD'S.

N031S1118 VOTING LOGIC ROW 14 PDP INTG INTG INTG K K :  
 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.

N031S1119 RSS HOLD PD INTG INTG INTG K K :  
 DESC: RANGE SAFETY HOLD STATE INDICATOR.

N031S1120 VOTING LOGIC ROW 15 PDP INTG INTG INTG K K :  
 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.

N031S1121 STD HOLD PD INTG INTG INTG K K :  
 DESC: STD HOLD STATE INDICATOR.

N031S1122 VOTING LOGIC ROW 16 PDP INTG INTG INTG K K :  
 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.

N031S1123 DPS APPSET SW HEALTH CHECK FAIL PD INTG INTG INTG K K :  
 DESC: OFF=APPSET SW HEALTH CHECK IS SUCCESSFUL (HEALTH IS GOOD).  
 ON= APPSET SW HEALTH CHECK IS UNSUCCESSFUL (HEALTH IS BAD).

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N031S1170	VOTING LOGIC ROW 17 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	
N031S117E	ECLS APPSET SW HEALTH CHECK FAIL DESC: OFF= APPSET SW HEALTH CHECK IS SUCCESSFUL (HEALTH IS GOOD) ON= APPSET SW HEALTH CHECK IS UNSUCCESSFUL (HEALTH IS BAD).	PD	INTEG	INTEG	INIG	INIG	INIG	K	K	:12-20/1
N031S1180	VOTING LOGIC ROW 18 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INIG	INIG	INIG	K	K	
N031S118E	EPDC APPSET SW HEALTH CHECK FAIL DESC: OFF= APPSET SW HEALTH CHECK IS SUCCESSFUL (HEALTH IS GOOD) ON= APPSET SW HEALTH CHECK IS UNSUCCESSFUL (HEALTH IS BAD).	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:12-20/1
N031S1190	VOTING LOGIC ROW 19 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INIG	INIG	INIG	K	K	
N031S119E	GOX BYPASS DESC: ML AND SINGLE SHOT VERIFY PROCESSING BYPASS FOR SYSTEM FD'S.	PD	INTEG	INTEG	INIG	INIG	INIG	K	K	:BASELINE
N031S1200	VOTING LOGIC ROW 20 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INIG	INIG	INIG	K	K	
N031S120E	GOX LIMITS AND CONTROL TO GLS DESC: SHOWS WHEN GLS LIMITS AND FD CCM SET.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:BASELINE
N031S1210	VOTING LOGIC ROW 21 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INIG	INIG	INIG	K	K	
N031S121E	MIP 1 ACTIVE DESC: USED TO INDICATE WHEN MIP 1 IS ACTIVE.	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:BASELINE
N031S1220	VOTING LOGIC ROW 22 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INIG	INIG	INIG	K	K	
N031S122E	GMC APPSET SW HEALTH CHECK FAIL DESC: OFF= APPSET SW HEALTH CHECK IS SUCCESSFUL (HEALTH IS GOOD) ON= APPSET SW HEALTH CHECK IS UNSUCCESSFUL (HEALTH IS BAD).	PD	INIEG	INIEG	INIG	INIG	INIG	K	K	:12-20/1
N031S1230	VOTING LOGIC ROW 23 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INIG	INIG	INIG	K	K	
N031S123E	MIP 2 ACTIVE DESC: USED TO INDICATE MIP 2 ACTIVE.	PD	INTEG	INTEG	INIG	INIG	INIG	K	K	:BASELINE

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N031S1244	VOTING LOGIC ROW 24 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INILG	INTG	INTG	INTG	K	K	
N031S124E	HYDR APPSET SW HEALTH CHECK FAIL DESC: OFF= APPSET SW HEALTH CHECK IS SUCCESSFUL (HEALTH IS GOOD) ON= APPSET SW HEALTH CHECK IS UNSUCCESSFUL (HEALTH IS BAD).	PD	INTEG	INTEG	INTG	INTG	INTG	K	K	:12-20/1
N031S125D	VOTING LOGIC ROW 25 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
N031S125E	MAINLINE EVENT 1 DESC: MAINLINE EVENT 1	PD	INTEG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N031S126D	VOTING LOGIC ROW 26 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
N031S126E	MAINLINE EVENT 2 DESC: MAINLINE EVENT 2	PD	INTEG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N031S127D	VOTING LOGIC ROW 27 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
N031S127E	INST APPSET SW HEALTH CHECK FAIL DESC: OFF= APPSET SW HEALTH CHECK IS SUCCESSFUL (HEALTH IS GOOD) ON= APPSET SW HEALTH CHECK IS UNSUCCESSFUL (HEALTH IS BAD).	PD	INTEG	INTEG	INTG	INTG	INTG	K	K	:12-20/1
N031S128D	VOTING LOGIC ROW 28 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
N031S128E	MAINLINE EVENT 4 DESC: MAINLINE EVENT 4	PD	INTEG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N031S129D	VOTING LOGIC ROW 29 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
N031S129E	ORB SUPPORT PWR UP/DN IND DESC: INDICATION TO AUTOMATED SOFTWARE THAT ORBITER IS BEING POWERED UP.	PD	INTEG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N031S130D	VOTING LOGIC ROW 30 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
N031S130E	SRB SUPPORT PWR UP/DN IND DESC: INDICATION TO AUTOMATED SOFTWARE THAT SRB IS BEING POWERED UP.	PD	INTEG	INTEG	INTG	INTG	INTG	K	K	:BASELINE

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N031S1310	VOTING LOGIC ROW 31 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
N031S131E	ET SUPPORT PWR UP/DN IND DESC: INDICATION TO AUTOMATED SOFTWARE THAT ET IS BEING POWERED UP.	PD	INTEG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N031S1320	VOTING LOGIC ROW 32 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
N031S132E	INTEG "SYSTEM UP" INDICATOR DESC: INDICATES THAT INTEGRATION CONSOLE IS SUPPORTING (NOT IMPLEMENTED)	PD	INTEG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N031S1330	VOTING LOGIC ROW 33 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N031S1340	VOTING LOGIC ROW 34 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
N031S1350	VOTING LOGIC ROW 35 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
N031S1360	VOTING LOGIC ROW 36 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
N031S1370	VOTING LOGIC ROW 37 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
N031S1380	VOTING LOGIC ROW 38 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
N031S1390	VOTING LOGIC ROW 39 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
N031S1400	VOTING LOGIC ROW 40 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
N031S1410	VOTING LOGIC ROW 41 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
N031S1420	VOTING LOGIC ROW 42 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
N031S1430	VOTING LOGIC ROW 43 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	

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N031S1440	VOTING LOGIC ROW 44 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIEG	INIEG	INIEG	K	K	
N031S1450	VOTING LOGIC ROW 45 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIEG	INIEG	INIEG	K	K	
N031S1460	VOTING LOGIC ROW 46 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIEG	INIEG	INIEG	K	K	
N031S1470	VOTING LOGIC ROW 47 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIEG	INIEG	INIEG	K	K	
N031S1480	VOTING LOGIC ROW 48 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIEG	INIEG	INIEG	K	K	
N031S1490	VOTING LOGIC ROW 49 DESC: BIT DIGITAL MANIPULATION - DIGITAL PATTERN HEX.	PDP	INIEG	INIEG	INIEG	INIEG	INIEG	K	K	
N031S1500	VOTING LOGIC ROW 50 DESC: BIT MANIPULATION.	PDP	INIEG	INIEG	INIEG	INIEG	INIEG	K	K	
N031S1510	LOCKOUT MASK 1 DESC: BIT MANIPULATION.	PDP	INIEG	INIEG	INIEG	INIEG	INIEG	K	K	
N031S1520	VERIFY FAILURE 17 DESC: THIS PDP WILL HAVE A SPECIFIC BIT SET TO "1" BY THE GLS MAINLINE SEQUENCER TO INDICATE THAT A SPECIFIC HARDWARE MSMT HAS FAILED A VERIFICATION CHECK. THE MAINLINE CVFY/VFY LOOKUP SCHEDULAR WILL THEN STRIP OUT ALL "1" BITS AND PASS THIS INFORMATION TO THE MAINLINE VERIFY LOOKUP PROGRAM WHICH WILL DISPLAY THE SPECIFIC MSMT THAT FAILED SO IT CAN BE PROCESSED FOR MASKING OPERATIONS IF REQUIRED. THIS PSEUDO WILL BE CHECKED FOR "1" BITS TO DETERMINE IF A GLS MILESTONE IS GO OR NOGO.	PDP	INIEG	INIEG	INIEG	INIEG	INIEG	B	B	C:113-20/03
N031S1530	LOCKOUT MASK 3 DESC: BIT MANIPULATION.	PDP	INIEG	INIEG	INIEG	INIEG	INIEG	K	K	
N031S1540	VERIFY MASK 1 DESC: BIT MANIPULATION.	PDP	INIEG	INIEG	INIEG	INIEG	INIEG	K	K	
N031S1550	VERIFY MASK 2 DESC: BIT MANIPULATION.	PDP	INIEG	INIEG	INIEG	INIEG	INIEG	K	K	
N031S1560	VERIFY MASK 3 DESC: BIT MANIPULATION.	PDP	INIEG	INIEG	INIEG	INIEG	INIEG	K	K	



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N03151570 VERIFY MASK 4 PDP INTG INTEG INTG INTG K K K :  
DESC: BIT MANIPULATION.

N03151580 VERIFY MASK 5 PDP INTG INTEG INTG INTG K K K :  
DESC: BIT MANIPULATION.

N03151590 VERIFY MASK 6 PDP INTG INTEG INTG INTG K K K :  
DESC: BIT MANIPULATION.

N03151600 INTERRUPT VOTING LOGIC 42 PDP INTG INTEG INTG INTG K K K :  
DESC: BIT MANIPULATION.

N03151610 VERIFY FAILURE 18 PDP INTG INTEG INTG INTG B B C:013-20/US  
DESC: THIS PDP WILL HAVE A SPECIFIC BIT SET TO "1" BY THE GLS  
MAINLINE SEQUENCER TO INDICATE THAT A SPECIFIC HARDWARE  
MSMT HAS FAILED A VERIFICATION CHECK. THE MAINLINE CVFY/VFY  
LOOKUP SCHEDULEK WILL THEN STRIP OUT ALL "1" BITS AND PASS  
THIS INFORMATION TO THE MAINLINE VERIFY LOOKUP PROGRAM  
WHICH WILL DISPLAY THE SPECIFIC MSMT THAT FAILED SO IT CAN  
BE PROCESSED FOR MASKING OPERATIONS IF REQUIRED. THIS  
PSEUDO WILL BE CHECKED FOR "J" BITS TO DETERMINE IF A GLS  
MILESTONE IS GO OR NOGO.

N03151620 GLS EVENT COMPLETED PDP INTG INTEG INTG INTG K K K :BASELINE  
DESC: INDICATES THE LAST EVENT COMPLETED BY THE GLS.

N03151630 VERIFY MASK 7 PDP INTG INTEG INTG INTG K K K :  
DESC: HEX # SHOW MAINLINE VERIFY.

N03151640 VERIFY MASK 8 PDP INTG INTEG INTG INTG K K K :  
DESC: HEX # SHOW MAINLINE VERIFY.

N03151650 VERIFY MASK 9 PDP INTG INTEG INTG INTG K K K :  
DESC: HEX # SHOW MAINLINE VERIFY.

N03151660 VERIFY MASK 10 PDP INTG INTEG INTG INTG K K K :BASELINE  
DESC: HEX # SHOWS MAINLINE VERIFY MASK.

N03151670 VERIFY MASK 17 PDP INTG INTEG INTG INTG B B C:CSCB13-20/3  
DESC: THIS PDP WILL HAVE A SPECIFIC BIT SET TO "1" BY THE GLS  
VERIFY LOOKUP PROGRAMS TO INDICATE THAT A SPECIFIC HARDWARE  
MSMT FAILURE HAS BEEN MASKED BY MANUAL OPERATOR SELECTION.  
THE MAINLINE CVFY/VFY LOOKUP SCHEDULEK CAN STRIP OUT ALL  
"1" BITS AND, VIA THE VERIFY LOOKUP PROGRAMS, DISPLAY ALL  
HARDWARE FAILURES THAT HAVE BEEN MASKED OUT OF GLS. THIS  
PSEUDO WILL BE CHECKED FOR "J" BITS TO HELP DETERMINE IF A  
GLS MILESTONE IS GO OR NOGO.

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FD NAME	NOMENCLATURE	TYPE	ODIS	RSYS	OWN BY	SET BY	USE BY	LOC	SIG	AUTH
N031S168D	DPS I/O ERROR DESC: INDICATES WHAT I/O ERROR WAS RECEIVED.	PDP	INTEG	INTEG	INTG	INTG	INTG	B	C	BASES
N031S169D	CPLR COUNT DESC: CPLR COUNT - TOTALS HAVE THE SAME NUMBER OF CPLR'S THAT HAVE BEEN CALLED.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:
N031S170D	INTERRUPT FAILURE 26 DESC: CPLR COUNT - TOTALS HAVE THE SAME NUMBER OF CPLR'S THAT HAVE BEEN CALLED.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:
N031S171D	INTERRUPT FAILURE 27 DESC: DUMMY ROWS FOR FAILURE & VOTING LOGIC TABLES.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:
N031S172D	INTERRUPT FAILURE 28 DESC: DUMMY ROWS FOR FAILURE & VOTING LOGIC TABLES.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:
N031S173D	INTERRUPT FAILURE 29 DESC: DUMMY ROWS FOR FAILURE & VOTING LOGIC TABLES.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:
N031S174D	CONTROL LOGIC-CONSOLE SELECTION DESC: INDICATES WHICH CONSOLE HAS CRASHED TO PERFORM CL RSYS CHANGE.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:
N031S175D	CONSOLE SELECTION-DUAL NOTIF DESC: INDICATES WHICH CONSOLE - BKUP, INTG, MASTER - HAS BEEN SELECTED FOR INTERRUPT_PGRMS.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:
N031S176D	BYPASS INDICATOR DESC: INDICATES WHICH FUNCTIONS AND HOLDS ARE TO BE PERFORMED OR BYPASSED.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N031S177D	INTERRUPT FAILURE 30 DESC: CONTINGENCY ROUTINE CONCUR BEING PERFORMED.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N031S178D	INTERRUPT FAILURE 31 DESC: MODIFY INDICATOR - INDICATES WHICH FUNCTIONS AND HOLDS ARE TO BE PERFORMED OR BYPASSED.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:
N031S179D	INTERRUPT FAILURE 32 DESC: MODIFY INDICATOR - INDICATES WHICH FUNCTIONS AND HOLDS ARE TO BE PERFORMED OR BYPASSED.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:
N031S180D	INTERRUPT FAILURE 33 DESC: THE FIRST ELEMENT IN DISK FILES.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:BASELINE

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NUS11010	INTERRUPT FAILURE 34 DESC: USED TO STORE THE NEXT 5 MAINLINE SEQUENCES TO BE BYPASSED.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
NUS11020	INTERRUPT FAILURE 35 DESC: USED TO STORE THE NEXT 5 MAINLINE SEQUENCES TO BE BYPASSED.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
NUS11030	INTERRUPT FAILURE 36 DESC: USED TO STORE THE NEXT 5 MAINLINE SEQUENCES TO BE BYPASSED.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
NUS11040	INTERRUPT FAILURE 38 DESC: USED TO STORE THE NEXT 5 MAINLINE SEQUENCES TO BE BYPASSED.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
NUS11050	BYPASS 5 DESC: USED TO STORE THE NEXT 5 MAINLINE SEQUENCES TO BE BYPASSED.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
NUS11060	INTERRUPT FAILURE 39 DESC: USED TO SHOW THE NEXT 3 MAINLINE SEQS. TO HAVE THEIR GLS DISCRETE VALUES CHANGED.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
NUS11070	INTERRUPT FAILURE 40 DESC: USED TO SHOW THE NEXT 3 MAINLINE SEQS. TO HAVE THEIR GLS DISCRETE VALUES CHANGED.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
NUS11080	INTERRUPT FAILURE 41 DESC: USED TO SHOW THE NEXT 3 MAINLINE SEQS. TO HAVE THEIR GLS DISCRETE VALUES CHANGED.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
NUS11090	INTERRUPT FAILURE 42 DESC: INDICATES NEXT MAINLINE SEQ. TO CAUSE A BREAKOUT.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
NUS11900	INTERRUPT FAILURE 43 DESC: ML CVFY FAILWORD .	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
NUS11910	INTERRUPT FAILURE 1 DESC: ML CVFY FAILWORD 1.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
NUS11920	INTERRUPT FAILURE 2 DESC: ML CVFY FAILWORD 2.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
NUS11930	INTERRUPT FAILURE 3 DESC: ML CVFY FAILWORD 3.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
NUS11940	INTERRUPT FAILURE 4 DESC: ML CVFY FAILWORD 4.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	
NUS11950	INTERRUPT FAILURE 5 DESC: ML CVFY FAILWORD 5.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	

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OWN BY

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ODIS

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N031S1960	INTERRUPT FAILURE 6. DESC: ML CVFY FAILWORD 6.	PDP	INIEG	INIEG	INIG	INIG	INIG	K K	K
N031S1970	INTERRUPT FAILURE 7. DESC: ML CVFY FAILWORD 7.	PDP	INIEG	INIEG	INIG	INIG	INIG	K K	K
N031S1980	INTERRUPT FAILURE 8. DESC: ML CVFY FAILWORD 8.	PDP	INIEG	INIEG	INIG	INIG	INIG	K K	K
N031S1990	INTERRUPT FAILURE 9. DESC: ML CVFY FAILWORD 9.	PDP	INIEG	INIEG	INIG	INIG	INIG	K K	K
N031S2000	INTERRUPT FAILURE 10. DESC: ML CVFY FAILWORD 10.	PDP	INIEG	INIEG	INIG	INIG	INIG	K K	K
N031S2010	INTERRUPT FAILURE 11. DESC: ML CVFY FAILWORD 11.	PDP	INIEG	INIEG	INIG	INIG	INIG	K K	K
N031S2020	INTERRUPT FAILURE 12. DESC: ML CVFY FAILWORD 12.	PDP	INIEG	INIEG	INIG	INIG	INIG	K K	K
N031S2030	INTERRUPT FAILURE 13. DESC: ML CVFY FAILWORD 13.	PDP	INIEG	INIEG	INIG	INIG	INIG	K K	K
N031S2040	INTERRUPT FAILURE 14. DESC: ML CVFY FAILWORD 14.	PDP	INIEG	INIEG	INIG	INIG	INIG	K K	K
N031S2050	INTERRUPT FAILURE 15. DESC: ML CVFY FAILWORD 15.	PDP	INIEG	INIEG	INIG	INIG	INIG	K K	K
N031S2060	INTERRUPT FAILURE 16. DESC: ML CVFY FAILWORD 16.	PDP	INIEG	INIEG	INIG	INIG	INIG	K K	K
N031S2070	INTERRUPT FAILURE 17. DESC: ML CVFY FAILWORD 17.	PDP	INIEG	INIEG	INIG	INIG	INIG	K K	K
N031S2080	INTERRUPT FAILURE 18. DESC: ML CVFY FAILWORD 18.	PDP	INIEG	INIEG	INIG	INIG	INIG	K K	K
N031S2090	INTERRUPT FAILURE 19. DESC: ML CVFY FAILWORD 19.	PDP	INIEG	INIEG	INIG	INIG	INIG	K K	K
N031S2100	INTERRUPT FAILURE 20. DESC: ML CVFY FAILWORD 20.	PDP	INIEG	INIEG	INIG	INIG	INIG	K K	K
N031S2110	INTERRUPT FAILURE 21. DESC: ML CVFY FAILWORD 21.	PDP	INIEG	INIEG	INIG	INIG	INIG	K K	K

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N031S2120	INTERRUPT FAILURE 22 DESC: ML CVFY FAILWORD 22.	PDP	JNIEG	JNIEG	JNIG	JNIG	JNIG	K	K	
N031S2130	INTERRUPT FAILURE 23 DESC: ML CVFY FAILWORD 23.	PDP	JNIEG	JNIEG	JNIG	JNIG	JNIG	K	K	
N031S2140	INTERRUPT FAILURE 24 DESC: ML CVFY FAILWORD 24.	PDP	JNIEG	JNIEG	JNIG	JNIG	JNIG	K	K	
N031S2150	INTERRUPT FAILURE 25 DESC: ML CVFY FAILWORD 25	PDP	JNIEG	JNIEG	JNIG	JNIG	JNIG	K	K	:BASELINE
N031S2160	INTERRUPT VOTING LOGIC 1 DESC: ML CVFY VOTING LOGIC FAILWORD 1.	PDP	JNIEG	JNIEG	JNIG	JNIG	JNIG	K	K	:BASELINE
N031S2170	INTERRUPT VOTING LOGIC 2 DESC: ML CVFY VOTING LOGIC FAILWORD 2.	PDP	JNIEG	JNIEG	JNIG	JNIG	JNIG	K	K	:BASELINE
N031S2180	INTERRUPT VOTING LOGIC 3 DESC: ML CVFY VOTING LOGIC FAILWORD 3.	PDP	JNIEG	JNIEG	JNIG	JNIG	JNIG	K	K	:BASELINE
N031S2190	INTERRUPT VOTING LOGIC 4 DESC: ML CVFY VOTING LOGIC FAILWORD 4.	PDP	JNIEG	JNIEG	JNIG	JNIG	JNIG	K	K	:BASELINE
N031S2200	INTERRUPT VOTING LOGIC 5 DESC: ML CVFY VOTING LOGIC FAILWORD 5.	PDP	JNIEG	JNIEG	JNIG	JNIG	JNIG	K	K	:BASELINE
N031S2210	INTERRUPT VOTING LOGIC 6 DESC: ML CVFY VOTING LOGIC FAILWORD 6.	PDP	JNIEG	JNIEG	JNIG	JNIG	JNIG	K	K	:BASELINE
N031S2220	INTERRUPT VOTING LOGIC 7 DESC: ML CVFY VOTING LOGIC FAILWORD 7.	PDP	JNIEG	JNIEG	JNIG	JNIG	JNIG	K	K	:BASELINE
N031S2230	INTERRUPT VOTING LOGIC 8 DESC: ML CVFY VOTING LOGIC FAILWORD 8.	PDP	JNIEG	JNIEG	JNIG	JNIG	JNIG	K	K	:BASELINE
N031S2240	INTERRUPT VOTING LOGIC 9 DESC: ML CVFY VOTING LOGIC FAILWORD 9.	PDP	JNIEG	JNIEG	JNIG	JNIG	JNIG	K	K	:BASELINE
N031S2250	INTERRUPT VOTING LOGIC 10 DESC: ML CVFY VOTING LOGIC FAILWORD 10.	PDP	JNIEG	JNIEG	JNIG	JNIG	JNIG	K	K	:BASELINE
N031S2260	INTERRUPT VOTING LOGIC 11 DESC: ML CVFY VOTING LOGIC FAILWORD 11.	PDP	JNIEG	JNIEG	JNIG	JNIG	JNIG	K	K	:BASELINE
N031S2270	INTERRUPT VOTING LOGIC 12 DESC: ML CVFY VOTING LOGIC FAILWORD 12.	PDP	JNIEG	JNIEG	JNIG	JNIG	JNIG	K	K	:BASELINE

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N031S228D	INTERRUPT VOTING LOGIC 13 DESC: ML CVFY VOTING LOGIC FAILWORD 13.	PDP	INTG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N031S229D	INTERRUPT VOTING LOGIC 14 DESC: ML CVFY VOTING LOGIC FAILWORD 14.	PDP	INTG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N031S230D	INTERRUPT VOTING LOGIC 15 DESC: ML CVFY VOTING LOGIC FAILWORD 15.	PDP	INTG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N031S231D	INTERRUPT VOTING LOGIC 16 DESC: ML CVFY VOTING LOGIC FAILWORD 16.	PDP	INTG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N031S232D	INTERRUPT VOTING LOGIC 17 DESC: ML CVFY VOTING LOGIC FAILWORD 17.	PDP	INTG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N031S233D	INTERRUPT VOTING LOGIC 18 DESC: ML CVFY VOTING LOGIC FAILWORD 18.	PDP	INTG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N031S234D	INTERRUPT VOTING LOGIC 19 DESC: ML CVFY VOTING LOGIC FAILWORD 19.	PDP	INTG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N031S235D	INTERRUPT VOTING LOGIC 20 DESC: ML CVFY VOTING LOGIC FAILWORD 20.	PDP	INTG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N031S236D	INTERRUPT VOTING LOGIC 21 DESC: ML CVFY VOTING LOGIC FAILWORD 21.	PDP	INTG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N031S237D	INTERRUPT VOTING LOGIC 22 DESC: ML CVFY VOTING LOGIC FAILWORD 22.	PDP	INTG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N031S238D	INTERRUPT VOTING LOGIC 23 DESC: ML CVFY VOTING LOGIC FAILWORD 23.	PDP	INTG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N031S239D	INTERRUPT VOTING LOGIC 24 DESC: ML CVFY VOTING LOGIC FAILWORD 24.	PDP	INTG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N031S240D	INTERRUPT VOTING LOGIC 25 DESC: ML CVFY VOTING LOGIC FAILWORD 25.	PDP	INTG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N031S241D	INTERRUPT MASK 1 DESC: ML CVFY MASK WORD 1.	PDP	INTG	INTEG	INTG	INTG	INTG	K	K	:
N031S242D	INTERRUPT MASK 2 DESC: ML CVFY MASK WORD 2.	PDP	INTG	INTEG	INTG	INTG	INTG	K	K	:
N031S243D	INTERRUPT MASK 3 DESC: ML CVFY MASK WORD 3.	PDP	INTG	INTEG	INTG	INTG	INTG	K	K	:

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NU31S244D	INTERRUPT MASK 4 DESC: ML CVFY MASK WORD 4.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	K
NU31S245D	INTERRUPT MASK 5 DESC: ML CVFY MASK WORD 5.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	K
NU31S246D	INTERRUPT MASK 6 DESC: ML CVFY MASK WORD 6.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	K
NU31S247D	INTERRUPT MASK 7 DESC: ML CVFY MASK WORD 7.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	K
NU31S248D	INTERRUPT MASK 8 DESC: ML CVFY MASK WORD 8.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	K
NU31S249D	INTERRUPT MASK 9 DESC: ML CVFY MASK WORD 9.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	K
NU31S250D	INTERRUPT MASK 10 DESC: ML CVFY MASK WORD 10.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	K
NU31S251D	INTERRUPT MASK 11 DESC: ML CVFY MASK WORD 11.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	K
NU31S252D	INTERRUPT MASK 12 DESC: ML CVFY MASK WORD 12.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	K
NU31S253D	INTERRUPT MASK 13 DESC: ML CVFY MASK WORD 13.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	K
NU31S254D	INTERRUPT MASK 14 DESC: ML CVFY MASK WORD 14.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	K
NU31S255D	INTERRUPT MASK 15 DESC: ML CVFY MASK WORD 15.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	K
NU31S256D	INTERRUPT MASK 16 DESC: ML CVFY MASK WORD 16.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	K
NU31S257D	INTERRUPT MASK 17 DESC: ML CVFY MASK WORD 17.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	K
NU31S258D	INTERRUPT MASK 18 DESC: ML CVFY MASK WORD 18.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	K
NU31S259D	INTERRUPT MASK 19 DESC: ML CVFY MASK WORD 19.	PDP	INIEG	INIEG	INIG	INIG	INIG	K	K	K

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N031S2600	INTERRUPTI MASK 20 DESC: ML CVFY MASK WORD 20.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	K
N031S2610	INTERRUPT MASK 21 DESC: ML CVFY MASK WORD 21.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	K
N031S2620	INTERRUPTI MASK 22 DESC: ML CVFY MASK WORD 22.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	K
N031S2630	INTERRUPT MASK 23 DESC: ML CVFY MASK WORD 23.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	K
N031S2640	INTERRUPTI MASK 24 DESC: ML CVFY MASK WORD 24.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	K
N031S2650	INTERRUPT MASK 25 DESC: ML CVFY MASK WORD 25.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	K
N031S2660	LASI_EVENTI_GLS DESC: USED IN SSPZ1 HEADER TO DISPLAY THE LAST EVENT MILESTONE.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	K
N031S2670	MASTER STEP DESC: INDICATES LAST MAINLINE SEQUENCE EXECUTED.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N031S2680	SEQUENCE MODE DESC: SSPZ1 DISPLAY GLS STATUS.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	K
N031S2690	OPERATIONS MESSAGE DESC: OPS MODE MESSAGE.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	K
N031S2700	LOCATION TEST DESC: INDICATES WHETHER GLS ML IS USED OR NOT.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N031S2710	EXIT PATTERN DESC: HEX_PATTERN RELATING TO THE FAILED FD CAUSING THE EXIT.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	K
N031S2720	VERIFY FAILURE 1 DESC: SHOWS ML HEX # FOR FAILED ML VFY FD.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	K
N031S2730	VERIFY FAILURE 2 DESC: SHOWS ML HEX # FOR FAILED ML VFY FD.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	K
N031S2740	VERIFY FAILURE 3 DESC: SHOWS ML HEX # FOR FAILED ML VFY FD.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	K
N031S2750	VERIFY FAILURE 4 DESC: SHOWS ML HEX # FOR FAILED ML VFY FD.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	K



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NO31S276D	VERIFY_FAILURE_5 DESC: SHOWS ML HEX # FOR FAILED ML VFY FD.	PDP	INIEG	INIEG	INIG	INIG	K K	
NO31S277D	VERIFY_FAILURE_6 DESC: SHOWS ML HEX # FOR FAILED ML VFY FD.	PDP	INIEG	INIEG	INIG	INIG	K K	
NO31S278D	VERIFY_FAILURE_7 DESC: SHOWS ML HEX # FOR FAILED ML VFY FD.	PDP	INIEG	INIEG	INIG	INIG	K K	
NO31S279D	VERIFY_FAILURE_8 DESC: SHOWS ML HEX # FOR FAILED ML VFY FD.	PDP	INIEG	INIEG	INIG	INIG	K K	
NO31S280D	VERIFY_FAILURE_9 DESC: SHOWS ML HEX # FOR FAILED ML VFY FD.	PDP	INIEG	INIEG	INIG	INIG	K K	
NO31S281D	VERIFY_FAILURE_10 DESC: SHOWS ML HEX # FOR FAILED ML VFY FD.	PDP	INIEG	INIEG	INIG	INIG	K K	
NO31S282D	VERIFY_FAILURE_11 DESC: SHOWS ML HEX # FOR FAILED ML VFY FD.	PDP	INIEG	INIEG	INIG	INIG	K K	
NO31S283D	VERIFY_FAILURE_12 DESC: SHOWS ML HEX # FOR FAILED ML VFY FD.	PDP	INIEG	INIEG	INIG	INIG	K K	
NO31S284D	MILESTONE DESC: USED IN SSPZ1 HEADER TO DISPLAY PAST MILESTONES.	PDP	INIEG	INIEG	INIG	INIG	K K	:BASELINE
NO31S285D	LCC FAILURES COUNTER DESC: LCC_FAILURE COUNTER.	PDP	INIEG	INIEG	INIG	INIG	K K	:BASELINE
NO31S286D	INTERRUPT_FAILURE_44 DESC: USED IN SSPZ1 HEADER TO DISPLAY NEXT MILESTONE.	PDP	INIEG	INIEG	INIG	INIG	K K	
NO31S287D	INTERRUPT_FAILURE_45 DESC: ML_INTERRUPT_FAILURE COUNTER.	PDP	INIEG	INIEG	INIG	INIG	K K	
NO31S288D	INTERRUPT_FAILURE_46 DESC: ML VOTING LOGIC FAILURE COUNTER.	PDP	INIEG	INIEG	INIG	INIG	K K	
NO31S289D	INTERRUPT_FAILURE_47 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INIG	INIG	K K	
NO31S290D	INTERRUPT_FAILURE_48 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INIG	INIG	K K	
NO31S303D	INTERRUPT_FAILURE_49 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INIG	INIG	K K	

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FD NAME	NOMENCLATURE	TYPE	ODIS	RSYS	OWN BY	SET BY	USE BY	LOC SIG	AUTH
N031S304D	MASK ROW 56 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INIG	INTG	INTG	K K	K
N031S305D	MASK ROW 55 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INIG	INTG	INTG	K K	K
N031S306D	MASK ROW 56 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INIG	INTG	INTG	K K	K
N031S307D	MASK ROW 57 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INIG	INTG	INTG	K K	K
N031S308D	INTERRUPT FAILURE 50 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INIG	INTG	INTG	K K	K
N031S309D	INTERRUPT VOTING LOGIC 26 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INIG	INTG	INTG	K K	K
N031S310D	INTERRUPT VOTING LOGIC 27 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INIG	INTG	INTG	K K	K
N031S311D	INTERRUPT VOTING LOGIC 28 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INIG	INTG	INTG	K K	K
N031S312D	INTERRUPT VOTING LOGIC 29 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INIG	INTG	INTG	K K	K
N031S313D	INTERRUPT VOTING LOGIC 30 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INIG	INTG	INTG	K K	K
N031S314D	INTERRUPT VOTING LOGIC 31 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INIG	INTG	INTG	K K	K
N031S315D	INTERRUPT VOTING LOGIC 32 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INIG	INTG	INTG	K K	K
N031S316D	INTERRUPT VOTING LOGIC 33 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INIG	INTG	INTG	K K	K
N031S317D	INTERRUPT VOTING LOGIC 34 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INIG	INTG	INTG	K K	K
N031S318D	INTERRUPT VOTING LOGIC 35 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INIG	INTG	INTG	K K	K
N031S319D	INTERRUPT VOTING LOGIC 36 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INIG	INTG	INTG	K K	K

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FD NAME	NOMENCLATURE	TYPE	ODIS	RSYS	OWN BY	SET BY	USE BY	LOC	SIG	AUTH
NO313200	INTERRUPT VOTING LOGIC 37 DESC: USED IN BIT MANIPULATION.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	
NO313210	INTERRUPT VOTING LOGIC 38 DESC: USED IN BIT MANIPULATION.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	
NO313220	INTERRUPT VOTING LOGIC 39 DESC: USED IN BIT MANIPULATION.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	
NO313230	INTERRUPT VOTING LOGIC 40 DESC: USED IN BIT MANIPULATION.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	
NO313240	INTERRUPT VOTING LOGIC 41 DESC: USED IN BIT MANIPULATION.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	
NO313260	INTERRUPT VOTING LOGIC 43 DESC: USED IN BIT MANIPULATION.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	
NO313270	INTERRUPT VOTING LOGIC 44 DESC: USED IN BIT MANIPULATION.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	
NO313280	INTERRUPT VOTING LOGIC 45 DESC: USED IN BIT MANIPULATION.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	
NO313290	INTERRUPT VOTING LOGIC 46 DESC: USED IN BIT MANIPULATION.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:BASELINE
NO313300	PRECOUNT STATUS DESC: INDICATES PRECOUNT OR COUNTING STATUS.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:BASELINE
NO313310	RSS HOLD FD XFER DESC: INDICATES BOTH READY TO PERFORM RSYS TRANSFER OF RSS HOLD FD'S AND RSYS TRANSFER COMPLETE OF RSS HOLD FD'S.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:BASELINE
NO313320	INTERRUPT VOTING LOGIC 47 DESC: \$T0C IS COMPLETE	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:BASELINE
NO313330	BYPASS GMTLO CHECK DESC: AD BYPASS GMTLO CHECK.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:BASELINE
NO313340	SRB IGN-L/D IND DESC: SRB IGN/L0 OCCURED	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:BASELINE
NO313350	INTERRUPT VOTING LOGIC 48 DESC: USED IN BIT MANIPULATION.	PDP	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	:BASELINE

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FD NAME	NOMENCLATURE	TYPE	ODIS	RSYS	OWN BY	SET BY	USE BY	LOC	SIG	AUTH
N031S3360	VERIFY FAILURE 13 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INTG	INTG	INTG	K	K	:BASELINE
N031S3370	VERIFY MASK 13 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INTG	INTG	INTG	K	K	:BASELINE
N031S3380	VERIFY MASK 11 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INTG	INTG	INTG	K	K	:BASELINE
N031S3390	VERIFY MASK 12 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INTG	INTG	INTG	K	K	:BASELINE
N031S3400	INTERRUPT VOIING LOGIC 49 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INTG	INTG	INTG	K	K	:BASELINE
N031S3410	FAILURE ROW 66 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INTG	INTG	INTG	K	K	:BASELINE
N031S3420	FAILURE ROW 67 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INTG	INTG	INTG	K	K	:BASELINE
N031S3430	FAILURE ROW 68 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INTG	INTG	INTG	K	K	:BASELINE
N031S3440	FAILURE ROW 69 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INTG	INTG	INTG	K	K	:BASELINE
N031S3450	FAILURE ROW 70 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INTG	INTG	INTG	K	K	:BASELINE
N031S3460	FAILURE ROW 71 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INTG	INTG	INTG	K	K	:BASELINE
N031S3470	TC HOLD/RESUME DESC: INDICATES AN STD/RSS_HOLD/RESUME REQUEST.	PDP	INIEG	INIEG	INTG	INTG	INTG	K	K	:BASELINE
N031S3480	INTERRUPT VOIING LOGIC 50 DESC: MISSION MONITOR	PDP	INIEG	INIEG	INTG	INTG	INTG	K	K	:BASELINE
N031S3490	DUAL NOTIFICATION INDICATOR DESC: INDICATES WHETHER DUAL NOTIFICATION IS ACTIVATED OR NOT.	PDP	INIEG	INIEG	INTG	INTG	INTG	K	K	:BASELINE
N031S3500	PROCESSOR ACTIVITY INDICATOR DESC: SELECTS WHICH LIP/MIP IS ACTIVE OR IS REQUESTED TO BE TERMINATED.	PDP	INIEG	INIEG	INTG	INTG	INTG	K	K	:BASELINE

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FD NAME	NOMENCLATURE	TYPE	ODIS	RSYS	OWN BY	SET BY	USE BY	LOC	SIG	AUTH
N0313510	INTERRUPT MASK 26 DESC: USED IN BIT MANIPULATION.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N0313520	INTERRUPT MASK 27 DESC: USED IN BIT MANIPULATION.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N0313530	INTERRUPT MASK 28 DESC: USED IN BIT MANIPULATION.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N0313540	INTERRUPT MASK 29 DESC: USED IN BIT MANIPULATION.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N0313550	INTERRUPT MASK 30 DESC: HEX NUMBER SHOWING ML VFY FAILURES (USED IN BIT MANIPULATION).	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:10-34/20
N0313560	INTERRUPT MASK 31 DESC: HEX NUMBER SHOWING ML VFY FAILURES (USED IN BIT MANIPULATION).	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:10-34/20
N0313570	INTERRUPT MASK 32 DESC: HEX NUMBER SHOWING ML VFY FAILURES (USED IN BIT MANIPULATION).	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:10-34/20
N0313580	INTERRUPT MASK 33 DESC: HEX NUMBER SHOWING ML VFY FAILURES (USED IN BIT MANIPULATION).	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:10-34/20
N0313590	INTERRUPT MASK 34 DESC: USED IN BIT MANIPULATION.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N0313600	INTERRUPT MASK 35 DESC: USED IN BIT MANIPULATION.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N0313610	INTERRUPT MASK 36 DESC: USED IN BIT MANIPULATION.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N0313620	INTERRUPT MASK 37 DESC: USED IN BIT MANIPULATION.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N0313630	INTERRUPT MASK 38 DESC: USED IN BIT MANIPULATION.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
N0313640	INTERRUPT MASK 39 DESC: USED IN BIT MANIPULATION.	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:BASELINE

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FO NAME	NOMENCLATURE	TYPE	ODIS	RSYS	OWN BY	SET BY	USE BY	LOC	SIG	AUTH
N0315365D	INTERRUPT MASK 40 DESC: USED IN BIT MANIPULATION.	PDP	JNIEG	JNIEG	JNIEG	JNIEG	JNIEG	K	K	:BASELINE
N0315366D	INTERRUPT MASK 41 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INIEG	INIEG	INIEG	K	K	:BASELINE
N0315367D	INTERRUPT MASK 42 DESC: USED IN BIT MANIPULATION.	PDP	JNIEG	JNIEG	JNIEG	JNIEG	JNIEG	K	K	:BASELINE
N0315368D	INTERRUPT MASK 43 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INIEG	INIEG	INIEG	K	K	:BASELINE
N0315369D	INTERRUPT MASK 44 DESC: USED IN BIT MANIPULATION.	PDP	JNIEG	JNIEG	JNIEG	JNIEG	JNIEG	K	K	:BASELINE
N0315370D	INTERRUPT MASK 45 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INIEG	INIEG	INIEG	K	K	:BASELINE
N0315371D	INTERRUPT MASK 46 DESC: USED IN BIT MANIPULATION.	PDP	JNIEG	JNIEG	JNIEG	JNIEG	JNIEG	K	K	:BASELINE
N0315372D	INTERRUPT MASK 47 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INIEG	INIEG	INIEG	K	K	:BASELINE
N0315373D	INTERRUPT MASK 48 DESC: USED IN BIT MANIPULATION.	PDP	JNIEG	JNIEG	JNIEG	JNIEG	JNIEG	K	K	:BASELINE
N0315374D	INTERRUPT MASK 49 DESC: USED IN BIT MANIPULATION.	PDP	INIEG	INIEG	INIEG	INIEG	INIEG	K	K	:BASELINE
N0315375D	INTERRUPT MASK 50 DESC: USED IN BIT MANIPULATION.	PDP	JNIEG	JNIEG	JNIEG	JNIEG	JNIEG	K	K	:BASELINE
N0315376D	EPDC/INIEG COMM LINK DESC: USED FOR POWER UP/DOWN TASK ASSIGNMENTS.	PDP	INIEG	INIEG	INIEG	INIEG	INIEG	B	B	C:BASES EPDC
N0315377D	ECLSS/INIEG COMM LINK DESC: USED FOR POWER UP/DOWN TASK ASSIGNMENTS.	PDP	JNIEG	JNIEG	JNIEG	JNIEG	JNIEG	B	B	C:BASES ECLSS EPDC
N0315378D	INST/INIEG COMM LINK DESC: USED FOR POWER UP/DOWN TASK ASSIGNMENTS.	PDP	INIEG	INIEG	INIEG	INIEG	INIEG	B	B	C:BASES INST EPDC
N0315379D	DPS/INIEG COMM LINK DESC: USED FOR POWER UP/DOWN TASK ASSIGNMENTS.	PDP	JNIEG	JNIEG	JNIEG	JNIEG	JNIEG	B	B	C:BASES DPS EPDC

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FD DATE \_\_\_\_\_ Nomenclature \_\_\_\_\_ TYPE \_\_\_\_\_ UDIS \_\_\_\_\_ RSYS \_\_\_\_\_ OWN BY \_\_\_\_\_ SET BY \_\_\_\_\_ USE BY \_\_\_\_\_ LOC SIG \_\_\_\_\_ AUTH \_\_\_\_\_

NO318450D MSG REV PDP FOR OPS CONC 5 PDP INTG INTEG INTG K K :9-34/42  
 DESC: USED TO IDENTIFY WHICH CONCURRENCIES IN THE INTG CONSOLE ARE UPDATING MESSAGE/PROMPT OUTPUTS OR REQUIRE MESSAGE PROCESSING SERVICES (REF. SECTION 10 CCMS APPLICATION S/W STRUCTURE STAND #50K00027).

NO318451D INTG OPS 5 MAILBOX WORD 1 PDP INTG INTEG INTG K K :BASELINE  
 DESC: USED AS COMMUNICATION MAILBOXES WITHIN THE INTEGRATION CONSOLE SOFTWARE SET (REF SECT 8 CCMS APPLICATION SOFTWARE STRUCTURE STANDARD #80K00027).

NO318452D INTG OPS 5 MAILBOX WORD 2 PDP INTG INTEG INTG K K :BASELINE  
 DESC: USED AS COMMUNICATION MAILBOXES WITHIN THE INTEGRATION CONSOLE SOFTWARE SET (REF SECT 8 CCMS APPLICATION SOFTWARE STRUCTURE STANDARD #80K00027).

NO318453D INTG OPS 5 MAILBOX WORD 3 PDP INTG INTEG INTG K K :BASELINE  
 DESC: USED AS COMMUNICATION MAILBOXES WITHIN THE INTEGRATION CONSOLE SOFTWARE SET (REF SECT 8 CCMS APPLICATION SOFTWARE STRUCTURE STANDARD #80K00027).

NO318454D VERIFY MASK 18 PDP INTG INTEG INTG B B C:CSCB13-20/3  
 DESC: THIS PDP WILL HAVE A SPECIFIC BIT SET TO "1" BY THE GLS VERIFY LOOKUP PROGRAMS TO INDICATE THAT A SPECIFIC HARDWARE MSMT FAILURE HAS BEEN MASKED BY MANUAL OPERATOR SELECTION. THE MAINLINE CVFY/VFY LOOKUP SCHEDULE CAN STRIP OUT ALL "1" BITS AND, VIA THE VERIFY LOOKUP PROGRAMS, DISPLAY ALL HARDWARE FAILURES THAT HAVE BEEN MASKED OUT OF GLS. THIS PSEUDO WILL BE CHECKED FOR "1" BITS TO HELP DETERMINE IF A GLS MILESTONE IS GO OR NOGO.

NO318455D RSYS CHANGE GRP. OWNER 3 AND 4 PDP INTG INTEG INTG K K :BASELINE  
 DESC: USED TO INDICATE THE APPLICATION SET THAT CURRENTLY HAS RSYS FOR RSYS CHANGE GROUP 3 AND 4

NO318456D RSYS CHANGE GRP. OWNER 5 AND 6 PDP INTG INTEG INTG K K :BASELINE  
 DESC: USED TO INDICATE THE APPLICATION SET THAT CURRENTLY HAS RSYS FOR RSYS CHANGE GROUP 5 AND 6

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FD NAME	NOMENCLATURE	TYPE	ODIS	RSYS	OWN BY	SET BY	USE BY	LOC	SIG	AUTH
NU315120	RSYS CHANGE GRP. OWNER 117 AND 118 DESC: USED TO INDICATE THE APPLICATION SET THAT CURRENTLY HAS RSYS FOR RSYS CHANGE GROUP 117 AND 118	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:8-34/22
NU315130	RSYS CHANGE GRP. OWNER 119 AND 120 DESC: USED TO INDICATE THE APPLICATION SET THAT CURRENTLY HAS RSYS FOR RSYS CHANGE GROUP 119 AND 120	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:8-34/22
NU315140	RSYS CHANGE GRP. OWNER 121 AND 122 DESC: USED TO INDICATE THE APPLICATION SET THAT CURRENTLY HAS RSYS FOR RSYS CHANGE GROUP 121 AND 122	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:8-34/22
NU315150	RSYS CHANGE GRP. OWNER 123 AND 124 DESC: USED TO INDICATE THE APPLICATION SET THAT CURRENTLY HAS RSYS FOR RSYS CHANGE GROUP 123 AND 124	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:8-34/22
NU315160	RSYS CHANGE GRP. OWNER 125 AND 126 DESC: USED TO INDICATE THE APPLICATION SET THAT CURRENTLY HAS RSYS FOR RSYS CHANGE GROUP 125 AND 126	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:8-34/22
NU315170	RSYS CHANGE GRP. OWNER 127 AND 128 DESC: USED TO INDICATE THE APPLICATION SET THAT CURRENTLY HAS RSYS FOR RSYS CHANGE GROUP 127 AND 128	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:8-34/22
NU315180	AU/B AND AU/I SEIS 1 AND 2 DESC: USED TO INDICATE THE LOCATION OF THE APPLICATION SET	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:8-34/22
NU315190	PWR AND GLS SEIS 3 AND 4 DESC: USED TO INDICATE THE LOCATION OF THE APPLICATION SET	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:8-34/22
NU315200	DPS AND GNC SEIS 5 AND 6 DESC: USED TO INDICATE THE LOCATION OF THE APPLICATION SET	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:8-34/22
NU315210	EDPC AND PVD SEIS 7 AND 8 DESC: USED TO INDICATE THE LOCATION OF THE APPLICATION SET	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:8-34/22



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NOMENCLATURE TYPE ODIS RSYS OWN BY SET BY USE BY LOC SIG AUTH

N3401NIGR INTG OPS 5 PROMPI COMM COM INTELL INTG INTG INTG K K :12-34/8  
 DESC: FOUR WORDS OF USEABLE DATA GIVING MESSAGE LOOKUP DATA FOR A PARTICULAR TEXT STRING TO BE OUTPUT BY THIS CONCURRENCY TO THE CRI.

N3411NIGR BHYD IO INIGR REM COMM COM INTELL INTG HYD/SRB INTG K A A:SCB10-15/01  
 DESC: USED FOR AUTOMATION COMMUNICATION BETWEEN THE INTEGRATION CONSOLE AND THE BHYD CONSOLE

N5510002D TEST ID FOR SRB RANGE SAFETY PDP BRS INTEG INTG INTG INTG K K :  
 DESC: THIS PSEUDO FD IS USED BY INTEGRATION CONSOLE TO START A CERTAIN RANGE SAFETY TEST.

N7010000D FAIL MSG CNTR PDP EPDC EPDC INTG EPDC K K :BASELINE  
 DESC: PDP'S FDS NECESSARY FOR IMPLEMENTATION OF AUTOMATED S/W SET MAILBOXES FOR CONCURRENCY TO CONCURRENCY COMMUNICATION

ACTSTAT CDT STATUS PDP GSWVE VEGSW INTG INTG INTG K K :BASELINE  
 NOTE: UNDER EVALUATION AT KSC  
 DESC: CDT STATUS

NCPKCNTRL CHECKPOINT RESTART CONTROL PDP COWVE VEGSW INTG INTG INTG K K :  
 NOTE: UNDER EVALUATION AT KSC  
 DESC: CHECKPOINT RESTART CONTROL PSEUDO FD.  
 U000 = MUST BE ZEROED BY GOAL PROCEDURE BEFORE FLECPR IS PERFORMED.  
 8000 = INITIALIZATION SUCCESSFUL.  
 8600 = INITIALIZATION FAILED.  
 0001 = GOAL INTERFACE REQUESTED WHILE THE PSEUDO IS THIS VALUE, FLECPR PROCESSES GOAL REQUESTS.  
 0002 = GOAL REQUEST PROGRAM TERMINATION.  
 8002 = GOAL TERM REQUEST SUCCESSFUL.  
 8102 = GOAL TERM REQUEST FAILED - OPTIONS OR CHECKPOINTING STILL IN PROGRESS.

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CCMS RLV 90893

FD NAME Nomenclature TYPE UDIS RSYS OWN BY USE BY LOC SIG AUTH

LFPLDUB LDBD FEP ROUTING INDICATOR PDP 6SWVL CITEM INTG INTG INTG B B C:BASES  
 NOTE: UNDER EVALUATION AT KSC  
 DESC: USED BY THE GPC MEMORY AND MASS MEMORY OPTIONS TO DETERMINE WHETHER TO ISSUE THE REQUEST VIA THE LDBA OR LDBD.

U = ISSUE REQUEST VIA LDBA  
 1 = ISSUE REQUEST VIA LDBD  
 INDICATES WHICH LDB DESIGNATED OUR TASKS SHOULD BE ROUTED TO IN DUAL LDB CONFIGURATION.  
 #J00C = LDBD ASSIGNED LDB1  
 #J00D = LDBD ASSIGNED TO LDB2

RFIRINORM FIRING ROOM NUMBER PDP INTG INTEG INTG INTG INTG K K K :BASELINE  
 DESC: INDICATES FIRING ROOM NUMBER WHICH ICID RELOADS.

RFRI0011E INHIBIT COMMANDS TO GCU1 PD INTG INTG INTG INTG K K K :BASELINE  
 DESC: PROHIBITS THE ISSUANCE OF COMMANDS TO THE GCU IN OPPOSITE BAY.

NGPCABSINC GPCA BIT SYNC. PARAMETERS. PDP 6SWVL CITEM INTG INTG INTG K K K :5-34/74  
 NOTE: UNDER EVALUATION AT KSC  
 DESC: CONFIGURATION

NGPCBUSSEL GPC BUS SELECT FOR DUAL MODE PDP 6SWVL CITEM INTG INTG INTG K K K :  
 NOTE: UNDER EVALUATION AT KSC  
 DESC: INDICATES WHICH BUS IS ASSIGNED ID.

#8001 = LDBA ASSIGNED BUS 1 (LDBD ON BUS 2)  
 #8002 = LDBA ASSIGNED BUS 2 (LDBD ON BUS 1)

NGPCDUMCFG CURRENT LDBD GPC MEMORY CONFIG PDP 6SWDPS CITEM INTG DPS K K K :8-34/46  
 NOTE: UNDER EVALUATION AT KSC  
 DESC: ED IS REQUIRED IN THE BAY FOR LDBD FEP, WHEN USING S32 OR LATER SUPPORT SOFTWARE. SAME AS NGPCLMCFG BUT FOR LDBD.

NGPCBUSINC GPCS BIT SYNC. PARAMETERS PDP 6SWVL VEGSW INTG INTG INTG K K K :5-34/74  
 NOTE: UNDER EVALUATION AT KSC  
 DESC: CONFIGURATION

NHEAVYETNK HEAVY ET INDICATOR PD INTG INTEG INTG INTG INTG B B C:BASES  
 NOTE: LH2 AND LO2 INTERFACE NOT USED AT VLS  
 DESC: INDICATES THAT THE ET TANK IS HEAVY TYPE.

MLDCCOMSEC SECURE COMM ON LDBA AND LDBD LINKS PDP 6SWVL CITEM INTG INTG INTG K K K :5-34/70  
 NOTE: UNDER EVALUATION AT KSC  
 DESC: COMM MODE OR NOT

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FD NAME NOMENCLATURE TYPE ODIS RSYS OWN BY SET BY USE BY LOC SIG AUTH

LEFT\_SRB\_NUMBER PDP INTEG INTEG INTG INTG K K :BASELINE

LIGHT ET INDICATOR PD INTEG INTEG INTG INTG B B C:BASES  
 NOTE: LH2 AND L02 INTERFACE NOT USED AT VLS  
 DESC: INDICATES THAT THE ET TANK IS A LIGHT TYPL.

MAJOR TEST MAJOR TEST IN PROGRESS PDP INTEG INTEG INTG INTG K K :BASELINE  
 DESC: WILL INDICATE THE INTEGRATED TLST (OMI) BEING RUN.

ME-1 BIT SYNC. PARAMETERS PDP GSWVE VEGSW INTG INTG K K :5-34/74  
 NOTE: UNDER EVALUATION AT KSC  
 DESC: CONFIGURATION

MAIN ENGINE #1 PCM VALIDITY PDP GSWVE VEIDME INTG INTG K K :  
 NOTE: UNDER EVALUATION AT KSC  
 DESC: USED TO ENABLE AND DISABLE SPECIAL VALIDITY CHECKS ON THE PCM DATA RECEIVED BY THE SSME PCM FEP. THE VALIDITY CHECKS ARE ENABLE BY SETTING THE FD TO A ZERO AND DISABLED BY A NON-ZERO VALUE.

ME-2 BIT SYNC. PARAMETERS PDP GSWVE VEGSW INTG INTG K K :5-34/74  
 NOTE: UNDER EVALUATION AT KSC  
 DESC: CONFIGURATION

MAIN ENGINE #2 PCM VALIDITY PDP GSWVE VEIDME INTG INTG K K :  
 NOTE: UNDER EVALUATION AT KSC  
 DESC: USED TO ENABLE AND DISABLE SPECIAL VALIDITY CHECKS ON THE PCM DATA RECEIVED BY THE SSME PCM FEP. THE VALIDITY CHECKS ARE ENABLE BY SETTING THE FD TO A ZERO AND DISABLED BY A NON-ZERO VALUE.

ME-3 BIT SYNC. PARAMETERS PDP GSWVE VEGSW INTG INTG K K :5-34/74  
 NOTE: UNDER EVALUATION AT KSC  
 DESC: CONFIGURATION

MAIN ENGINE #3 PCM VALIDITY PDP GSWVE VEIDME INTG INTG K K :  
 NOTE: UNDER EVALUATION AT KSC  
 DESC: USED TO ENABLE AND DISABLE SPECIAL VALIDITY CHECKS ON THE PCM DATA RECEIVED BY THE SSME PCM FEP. THE VALIDITY CHECKS ARE ENABLE BY SETTING THE FD TO A ZERO AND DISABLED BY A NON-ZERO VALUE.

ME PATCH BUFFER PDP GSWVE VEIDME INTG INTG K K :  
 NOTE: UNDER EVALUATION AT KSC  
 DESC: USED BY THE LUB FEP FOR THE SSME COMPUTER PATCH BUFFER ADDRESS.

PSUEDO FUNCTION DESIGNATION CONTROL DOCUMENT

06/28/84

CCMS REV 90893

FD NAME NOMENCLATURE TYPE ODIS RSYS OWN BY SET BY USE BY LOC SIG AUTH

01A BIT SYNC PARAMETERS PDP GSKVE CITEM INTG INTG INTG K K S-34/74  
 NOTE: UNDER EVALUATION AT KSC  
 DESC: CONFIGURATION

01S BIT SYNC PARAMETERS PDP GSWL VLSW INTG INTG INTG K K S-34/74  
 NOTE: UNDER EVALUATION AT KSC  
 DESC: CONFIGURATION

ORBITER FLIGHT NUMBER PDP INTEG CITEM INTG INTG INTG K K :BASELINE  
 DESC: INDICATES NUMBER OF TIMES A PARTICULAR ORBITER HAS FLOWN.

ORBITER TAIL NUMBER PDP INTG CITEM INTG INTG INTG B B C:BASES  
 DESC: INDICATES ORBITER TAIL NUMBER (IE, 099, 100)

LOZ  
 MFS/LU2  
 MFS/LH2  
 DFS  
 EPDC  
 HYOA  
 HYFUEL

OPERATIONAL REA. TEST ADDR. 1 PDP GSWL VEGSW INTG INTG INTG K K :  
 NOTE: UNDER EVALUATION AT KSC  
 DESC: DP3RTIF MASTER CONSOLE WRITES HERE JRTIF READS IT TO GO TO  
 CDS. URI USE ONLY.

PAYLOAD BIT SYNC PARAMETERS PDP GSWL CITEM INTG INTG INTG K K S-34/74  
 NOTE: UNDER EVALUATION AT KSC  
 DESC: CONFIGURATION

PORT RMS INSTALLED PD INTEG CITEM INTG INTG INTG K K :BASELINE  
 DESC: INDICATES WHETHER THE PORT RMS HAS BEEN INSTALLED IN  
 ORBITER.

PRSD TANK SET 3 INSTALLED PD INTEG INTEG INTG INTG INTG K K :BASELINE  
 DESC: INDICATES THAT THE PRSD TANK SET 3 HAS/HASN'T BEEN  
 INSTALLED.

PRSD TANK SET 4 INSTALLED PD INTEG INTEG INTG INTG INTG K K :BASELINE  
 DESC: INDICATES THAT THE PRSD TANK SET 4 HAS/HASN'T BEEN  
 INSTALLED.

PRSD TANK SET 5 INSTALLED PD INTEG INTEG INTG INTG INTG K K :BASELINE  
 DESC: INDICATES THAT THE PRSD TANK SET 5 HAS/HASN'T BEEN  
 INSTALLED.

PSUEDO FUNCTION DESIGNATOR CONTROL DOCUMENT

08/28/84

CCMS REV 90893

FP NAME	NOMENCLATURE	TYPE	ODIS	RSYS	OWN BY	SET BY	USE BY	LOC	SIG	AUTH
PRSDTANKSET6	PRSD TANK SET 6 INSTALLED	PD	INTEG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
PRSDTANKSET7	PRSD TANK SET 7 INSTALLED	PD	INTEG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
RIGHTSRB	RIGHT SRB NUMBER	PDP	INTEG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
PCMSOURCE	PCM SOURCE SELECT CONTROL WORD	PDP	GSWVL	INTEG	INTG	INTG	INTG	K	K	:
FEPSTATUS	FEP SOURCE SELECT FEP STATUS	PDP	GSWVL	INTEG	INTG	INTG	INTG	K	K	:

DESC: INDICATES THAT THE PRSD TANK SET 6 HAS/HASN'T BEEN INSTALLED.

DESC: INDICATES THAT THE PRSD TANK SET 7 HAS/HASN'T BEEN INSTALLED.

DESC: INDICATES RIGHT SRB NUMBER.

NOTE: UNDER EVALUATION AT KSL

DESC: DIGITAL PATTERN

SOURCE SELECT CONTROL

U - GOAL INITIALIZES PRIOR TO PERFORM

BIT 0 = 1 - REQUEST COMPLETE

BIT 1 = 1 - PROCESSING REQUEST

BIT 12 = 1 - FEP ERROR(S) COMPLETION STATUS

BIT 13 = 1 - FEP PARAMETERS ERROR(S)

BIT 14 = 1 - UNABLE TO PROCESS - GLOBAL PARAMETER ERROR

BIT 15 = 1 - UNABLE TO PROCESS - SYSTEM TERMINATED PCMS.

NOTE: UNDER EVALUATION AT KSL

DESC: DIGITAL PATTERN

0 - NO SOURCE SELECT

BIT 1 = 1 - REQUEST 1 ERROR

BIT 2 = 1 - REQUEST 2 ERROR

BIT 3 = 1 - REQUEST 3 ERROR

BIT 4 = 1 - REQUEST 4 ERROR

BIT 5 = 1 - REQUEST 5 ERROR

BIT 6 = 1 - REQUEST 6 ERROR

BIT 7 = 1 - REQUEST 7 ERROR

BIT 8 = 1 - REQUEST 8 ERROR

BIT 9 = 1 - REQUEST 9 ERROR

BIT 10 = 1 - REQUEST 10 ERROR

BIT 11 = 1 - REQUEST 11 ERROR

BIT 12 = 1 - REQUEST 12 ERROR

- 0 = SUCCESSFUL
- 1 = INVALID INPUT
- 2 = DISK ERROR
- 3 = CTC ERROR

PSUEDO FUNCTION DESIGNATOR CONTROL DOCUMENT

08/26/64

CCMS REV 90893

FD NAME \_\_\_\_\_ NOMENCLATURE \_\_\_\_\_ TYPE \_\_\_\_\_ ODIS \_\_\_\_\_ RSYS \_\_\_\_\_ OWN BY \_\_\_\_\_ SET BY \_\_\_\_\_ USE BY \_\_\_\_\_ LOC SIG \_\_\_\_\_ AUTH \_\_\_\_\_

JSSMELoad SSME\_LOAD\_IN\_PROGRESS\_INDICATOR PDP GSWVE VEGSW INTG INTG INTG K A 28-34/26

NOTE: UNDER EVALUATION AT KSC  
DESC: PSEUDO IS SET/RESET TO INDICATE WHEN A LOAD EIG IS IN PROGRESS AND UPON COMPLETION THE FEP WILL UPDATE THIS PSEUDO WITH THE LOAD STATUS.

LOADPARMSIS PCM\_SOURCE\_SELECT\_PARAMETER\_STATUS PDP GSWVE INTLG INTG INTG K K :

NOTE: UNDER EVALUATION AT KSC  
DESC: DIGITAL PATTERN  
J = NO PARAMETER ERROR

- BIT 1 = 1 - REQUEST 1 PARAMETER ERROR
- BIT 2 = 1 - REQUEST 2 PARAMETER ERROR
- BIT 3 = 1 - REQUEST 3 PARAMETER ERROR
- BIT 4 = 1 - REQUEST 4 PARAMETER ERROR
- BIT 5 = 1 - REQUEST 5 PARAMETER ERROR
- BIT 6 = 1 - REQUEST 6 PARAMETER ERROR
- BIT 7 = 1 - REQUEST 7 PARAMETER ERROR
- BIT 8 = 1 - REQUEST 8 PARAMETER ERROR
- BIT 9 = 1 - REQUEST 9 PARAMETER ERROR
- BIT 10 = 1 - REQUEST 10 PARAMETER ERROR
- BIT 11 = 1 - REQUEST 11 PARAMETER ERROR
- BIT 12 = 1 - REQUEST 12 PARAMETER ERROR

- 0 = SUCCESSFUL
- 1 = INVALID INPUT
- 2 = DISK ERROR
- 3 = CTC ERROR

INSTORMSIN STARBOARD RMS INSTALLED PD INTEG CITEM INTG INTG INTG K K :BASELINE  
DESC: INDICATES THAT THE STARBOARD RMS HAS BEEN INSTALLED.

INSTNUMBER STS NUMBER PDP INTEG CITEM INTG INTG INTG K K :BASELINE  
DESC: INDICATES THE SHUTTLE TRANSPORTATION SYSTEM FLIGHT NUMBER.  
MFS/LU2  
DPS  
MECH  
MFS/LH2  
DPS  
KPDG

INSWOSYNC \*\*\* FD NOT FOUND IN CCMS DB \*\*\*  
NOTE: UNDER EVALUATION AT KSC  
DESC: INDICATE SWDF/SWOF FEP BIT SYNC CONFIGURATION.

KLJLJFKHBT ICID\_BUILD\_IN\_SUPPORT\_FOR\_KHB1XVAB PD INIEG INJEG INTG INTG INTG K K :BASELINE  
DESC: SELECTS HIGH BAY 1 AS A TEST SITE THAT THE CURRENT FLID SUPPORTS.  
DPS

PSUEDO FUNCTION DESIGNATOR CONTROL DOCUMENT  
08/28/84

CCMS REV 90893

FD NAME	NOMENCLATURE	TYPE	ODIS	RSYS	OWN BY	SET BY	USE BY	LOC	SIG	AUTH
NTL15FKHB2	ICID BUILD IN SUPPORT FOR KHB2(VAB) DESC: SELECTS HIGH BAY 2 AS A TEST SITE THAT THE CURRENT ICID SUPPORTS.	PD	INTG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
NTL15FKHB3	ICID BUILD IN SUPPORT FOR KHB3(VAB) DESC: SELECTS HIGH BAY 3 AS A TEST SITE THAT THE CURRENT ICID SUPPORTS.	PD	INTG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
NTL15FKHB4	ICID BUILD IN SUPPORT FOR KHB4(VAB) DESC: SELECTS HIGH BAY 4 AS A TEST SITE THAT THE CURRENT ICID SUPPORTS.	PD	INTG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
NTL15KMLP1	ICID BUILD IN SUPPORT FOR KMLP1 DESC: SELECTS MOBILE LAUNCH PLATFORM 1 AS A TEST SITE THAT THE CURRENT ICID SUPPORTS.	PD	INTG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
NTL15KMLP2	ICID BUILD IN SUPPORT FOR KMLP2 DESC: SELECTS MOBILE LAUNCH PLATFORM 2 AS A TEST SITE THAT THE CURRENT ICID SUPPORTS.	PD	INTG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
NTL15KMLP3	ICID BUILD IN SUPPORT FOR KMLP3 DESC: SELECTS MOBILE LAUNCH PLATFORM 3 AS A TEST SITE THAT THE CURRENT ICID SUPPORTS.	PD	INTG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
NTL15KOPF1	ICID BUILD IN SUPPORT FOR KOPF1 DESC: SELECTS ORBITER PROCESSING FACILITY BAY 1 AS A TEST SITE THAT THE CURRENT ICID SUPPORTS.	PD	INTG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
NTL15KOPF2	ICID BUILD IN SUPPORT FOR KOPF2 DESC: SELECTS ORBITER PROCESSING FACILITY BAY 2 AS A TEST SITE THAT THE CURRENT ICID SUPPORTS.	PD	INTG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
NTL15KPADA	ICID BUILD IN SUPPORT FOR KPADA DESC: SELECTS PAD A AS A TEST SITE THAT THE CURRENT ICID SUPPORTS.	PD	INTG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
NTL15KPADB	ICID BUILD IN SUPPORT FOR KPADB DESC: SELECTS PAD B AS A TEST SITE THAT THE CURRENT ICID SUPPORTS.	PD	INTG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
NTL15LHMF	ICID LOADED AT HMF INDICATOR DESC: INDICATES THAT ICID IS LOADED AT HMF.	PD	INTG	INTEG	INTG	INTG	INTG	K	K	:BASELINE
NTL15LHMSC	ICID LOADED AT KSC INDICATOR DESC: INDICATES THAT ICID IS LOADED AT KSC.	PD	INTG	INTEG	INTG	INTG	INTG	K	K	:BASELINE

PSUEDO FUNCTION DESIGN CONTROL DOCUMENT

08/26/64  
CCMS REV 90893

FD NAME	NOMENCLATURE	TYPE	ODIS	RSYS	OWN BY	SET BY	USE BY	LOC	SIG	AUTH
HICIDSRB	ICID LOADED AT SRB INDICATOR DESC: INDICATES THAT ICID IS LOADED AT SRB.	PD	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	BASELINE
HICIDSRB	ICID LOADED AT SAIL INDICATOR DESC: INDICATES THAT ICID IS LOADED AT SAIL.	PD	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	BASELINE
HICIDSRB	ICID LOADED AT NVAFB INDICATOR DESC: INDICATES THAT ICID IS LOADED AT NORTH VANDENBURG.	PD	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	BASELINE
HICIDSRB	ICID LOADED AT SVAFB INDICATOR DESC: INDICATES THAT ICID IS LOADED AT SOUTH VANDENBURG.	PD	INTEG	INTEG	INTEG	INTEG	INTEG	K	K	BASELINE
HICPCONTROL	TIME CRITICAL PATCHER CONTROL NOTE: UNDER EVALUATION AT KSC DESC: CONTROL PSEUDO USED FOR COMMUNICATION.	PDP	GSWVE	DFS	INTEG	INTEG	INTEG	K	K	
HICPPARM01	TIME CRITICAL PATCHER PARAMETER 1 NOTE: UNDER EVALUATION AT KSC DESC: PARAMETER PSEUDO USED FOR COMMUNICATION.	PDP	GSWVL	DFS	INTEG	INTEG	INTEG	K	K	
HICPPARM02	TIME CRITICAL PATCHER PARAMETER 2 NOTE: UNDER EVALUATION AT KSC DESC: PARAMETER PSEUDO USED FOR COMMUNICATION.	PDP	GSWVL	DFS	INTEG	INTEG	INTEG	K	K	
HICPPARM03	TIME CRITICAL PATCHER PARAMETER 3 NOTE: UNDER EVALUATION AT KSC DESC: PARAMETER PSEUDO USED FOR COMMUNICATION.	PDP	GSWVE	DFS	INTEG	INTEG	INTEG	K	K	
HICPPARM04	TIME CRITICAL PATCHER PARAMETER 4 NOTE: UNDER EVALUATION AT KSC DESC: PARAMETER PSEUDO USED FOR COMMUNICATION.	PDP	GSWVL	DFS	INTEG	INTEG	INTEG	K	K	
HICPPARM05	TIME CRITICAL PATCHER PARAMETER 5 NOTE: UNDER EVALUATION AT KSC DESC: PARAMETER PSEUDO USED FOR COMMUNICATION.	PDP	GSWVE	DFS	INTEG	INTEG	INTEG	K	K	
HICPPARM06	TIME CRITICAL PATCHER PARAMETER 6 NOTE: UNDER EVALUATION AT KSC DESC: PARAMETER PSEUDO USED FOR COMMUNICATION.	PDP	GSWVL	DFS	INTEG	INTEG	INTEG	K	K	
HICPPARM07	TIME CRITICAL PATCHER PARAMETER 7 NOTE: UNDER EVALUATION AT KSC DESC: PARAMETER PSEUDO USED FOR COMMUNICATION.	PDP	GSWVE	DFS	INTEG	INTEG	INTEG	K	K	
HICPPARM08	TIME CRITICAL PATCHER PARAMETER 8 NOTE: UNDER EVALUATION AT KSC DESC: PARAMETER PSEUDO USED FOR COMMUNICATION.	PDP	GSWVL	DFS	INTEG	INTEG	INTEG	K	K	



PSUEDO FUNCTION DESIGNATOR CONTROL DOCUMENT

08/28/84

CCMS RLV 90893

FD NAME Nomenclature TYPE ODIS RSYS OWN BY SET BY USE BY LOC SIG AUTH

NICPAR009 JANE CRITICAL PATCHER PARAMETER 9 PDP 65MVL DPS INTG INTG INTG K K K

NOTE: UNDER EVALUATION AT KSC  
DESC: PARAMETER PSEUDO USED FOR COMMUNICATION.

NICPARM10 JANE CRITICAL PATCHER PARAMETER 10 PDP 65MVL DPS INTG INTG INTG K K K

NOTE: UNDER EVALUATION AT KSC  
DESC: PARAMETER PSEUDO USED FOR COMMUNICATION.

HTOCALLOW TEST OPERATIONS CHANGE ALLOW PDP 65MVL VEGSW INTG INTG INTG K K K

NOTE: UNDER EVALUATION AT KSC  
DESC: INDICATES WHICH CONSOLE IS CURRENTLY CAPABLE OF REMOTELY PERFORMING TOC. VALUE WILL BE EQUAL TO THE HARDWARE PORT OF THE CONSOLE. C12 = 33.

INTJSTATUS TOC ACTIVE/NORMAL/ABNORMAL TERM PDP 65MVL VEGSW INTG INTG INTG K K K

NOTE: UNDER EVALUATION AT KSC  
DESC: INDICATES THE TOC ACTIVATION/TERMINATION STATUS. IF THE PSEUDO HAS A VALUE OF 0, \$TOC IS TERMINATED. IF THE PSEUDO HAS A VALUE OF #8000, \$TOC IS ACTIVE AND IF THE PSEUDO HAS A VALUE OF 1, \$TOC HAS TERMINATED WITH ERRORS.

NVEJSD010 RTIF COMPRESSION SET CHANGE DATA PDP VEGSW INTG INTG INTG K K K

NOTE: UNDER EVALUATION AT KSC  
DESC: PSEUDO TO FLAG RTIF TO SET COMPRESSION FOR SELECTED ANALOG ON A BIT COUNT

PSEUDO TO FLAG RTIF TO SET COMPRESSION FOR SELECTED ANALOG

NLH1X950E \*\*\* FD NOT FOUND IN CCMS DB \*\*\* LH2 LH2 LH2 V V C:04-001

DESC: THIS PSEUDO WILL BE SET TO ON WHEN THE REACTIVE CONTROL LOGIC SEQUENCE HAS AN UNPLANNED EXECUTION AND ISSUES COMMANDS.

NLH1X951E \*\*\* FD NOT FOUND IN CCMS DB \*\*\* LH2 LH2 LH2 V V C:04-001

DESC: THIS PSEUDO WILL BE SET TO ON WHEN THE REACTIVE CONTROL LOGIC SEQUENCE HAS AN UNPLANNED EXECUTION AND ISSUES COMMANDS.

NLH1X952E \*\*\* FD NOT FOUND IN CCMS DB \*\*\* LH2 LH2 LH2 V V C:04-001

DESC: THIS PSEUDO WILL BE SET TO ON WHEN THE REACTIVE CONTROL LOGIC SEQUENCE HAS AN UNPLANNED EXECUTION AND ISSUES COMMANDS.

PSUEDO FUNCTION DESIGNATOR CONTROL DOCUMENT

08/28/84

CCMS REV 90893

FD NAME	NOMENCLATURE	TYPE	ODIS	RSYS	OWN BY	SET BY	USE BY	LOC	SIG	AUTH
NL01X904E	CL NOTIF FOR GCL64, L02=INTG	PD	L02	L02	L02	L02	INTG	V	K	BASELINE
	DESC: THIS PSEUDO WILL BE SET TO ON WHEN THE REACTIVE CONTROL LOGIC SEQUENCE GCL64 HAS AN UNPLANNED EXECUTION AND ISSUES COMMANDS. THE INTEGRATION SOFTWARE WILL DISPLAY A MESSAGE TO THE CRT STATING WHICH SEQUENCE EXECUTED, WHEN AND THE RESPONSIBLE SYSTEM, AND THEN SET THE PSEUDO TO OFF.									
NL01X906E	*** FD NOT FOUND IN CCMS DB ***				L02	L02	INTG	V	V	C:04-001
	DESC: L02 ACKNOWLEDGE OF TERMINAL COUNT BREAKOUT.									
NL01X907E	*** FD NOT FOUND IN CCMS DB ***				L02	L02	INTG	V	V	A:04-001
	DESC: THIS PSEUDO WILL BE SET TO ON WHEN THE REACTIVE CONTROL LOGIC SEQUENCE HAS AN UNPLANNED EXECUTION AND ISSUES COMMANDS.									
NL01X908E	*** FD NOT FOUND IN CCMS DB ***				L02	L02	INTG	V	V	A:04-001
	DESC: GCL52Z65/66V L02 ET OVERPRESSURE.									
NL01X909E	*** FD NOT FOUND IN CCMS DB ***				L02	L02	INTG	V	V	C:04-001
	DESC: GCL54V LOSS OF PW10 OPEN IND									
NL01X910E	*** FD NOT FOUND IN CCMS DB ***				L02	L02	INTG	V	V	C:04-001
	DESC: GCL54V LOSS OF PVS OPEN IND									
NL01X911E	*** FD NOT FOUND IN CCMS DB ***				L02	L02	INTG	V	V	C:04-001
	DESC: GCL54V LOSS OF PDI OPEN IND									
NL01X912E	*** FD NOT FOUND IN CCMS DB ***				L02	L02	INTG	V	V	C:04-001
	DESC: GCL55V LOSS OF A141 OPEN IND									
NL01X913E	*** FD NOT FOUND IN CCMS DB ***				L02	L02	INTG	V	V	C:04-001
	DESC: GCL57V LOSS OF ROT05 OPEN IND									
NL01X914E	*** FD NOT FOUND IN CCMS DB ***				L02	L02	INTG	V	V	C:04-001
	DESC: GCL59V A8646U CLOSED IND ON									
NL01X915E	*** FD NOT FOUND IN CCMS DB ***				L02	L02	INTG	V	V	A:04-001
	DESC: GCL60V LOSS OF A86461 OPEN IND									
NL01X916E	*** FD NOT FOUND IN CCMS DB ***				L02	L02	INTG	V	V	A:04-001
	DESC: GCL61V LOW PU101/PU102 SUCTION PR									

PSUEDO FUNCTION DESIGNATOR CONTROL DOCUMENT

08/28/84

CCMS REV 90893

FD NAME NOMENCLATURE TYPE ODIS RSYS OWN BY SET BY USE BY LOC SIG AUTH

N371V920E LT TIMING FLAG PD PLBD PLBD MECH MECH B B :14-34/2  
 DESC: THIS PSEUDO DISCRETE IS NECESSARY FOR DETERMINING FUNCTIONS TO BE BYPASSED, EQUIPMENT TO BE BYPASSED, COMPONENTS TO BE BYPASSED AND GLOBAL DATA PATHS THAT ARE TO BE BYPASSED.

N371V920E LANDING GEAR TIMING FLAG PD PLBD PLBD MECH MECH B B :14-34/2  
 DESC: THIS PSEUDO DISCRETE IS NECESSARY FOR DETERMINING FUNCTIONS TO BE BYPASSED, EQUIPMENT TO BE BYPASSED, COMPONENTS TO BE BYPASSED AND GLOBAL DATA PATHS THAT ARE TO BE BYPASSED.

N371V950E PAYLOAD BAY DOOR TIMING FLAG PD PLBD PLBD MECH MECH B B :14-34/2  
 DESC: THIS PSEUDO DISCRETE IS NECESSARY FOR DETERMINING FUNCTIONS TO BE BYPASSED, EQUIPMENT TO BE BYPASSED, COMPONENTS TO BE BYPASSED AND GLOBAL DATA PATHS THAT ARE TO BE BYPASSED.

N371V960E RMS TIMING FLAG PD PLBD PLBD MECH MECH B B :14-34/2  
 DESC: THIS PSEUDO DISCRETE IS NECESSARY FOR DETERMINING FUNCTIONS TO BE BYPASSED, EQUIPMENT TO BE BYPASSED, COMPONENTS TO BE BYPASSED AND GLOBAL DATA PATHS THAT ARE TO BE BYPASSED.

N371V970E RADIATOR TIMING FLAG PD PLBD PLBD MECH MECH B B :14-34/2  
 DESC: THIS PSEUDO DISCRETE IS NECESSARY FOR DETERMINING FUNCTIONS TO BE BYPASSED, EQUIPMENT TO BE BYPASSED, COMPONENTS TO BE BYPASSED AND GLOBAL DATA PATHS THAT ARE TO BE BYPASSED.

N371V980E STAR TRACKING TIMING FLAG PD PLBD PLBD MECH MECH B B :14-34/2  
 DESC: THIS PSEUDO DISCRETE IS NECESSARY FOR DETERMINING FUNCTIONS TO BE BYPASSED, EQUIPMENT TO BE BYPASSED, COMPONENTS TO BE BYPASSED AND GLOBAL DATA PATHS THAT ARE TO BE BYPASSED.

N371V990E VENT DOOR TIMING FLAG PD PLBD PLBD MECH MECH B B :14-34/2  
 DESC: THIS PSEUDO DISCRETE IS NECESSARY FOR DETERMINING FUNCTIONS TO BE BYPASSED, EQUIPMENT TO BE BYPASSED, COMPONENTS TO BE BYPASSED AND GLOBAL DATA PATHS THAT ARE TO BE BYPASSED.

N41A1700X REPLACE LH2 ULLAGE PRESS N01 XDCR PD MPS MPS MPS/LH2 B B C:BASES  
 DESC: IF PSEUDO IS ON - INDICATES V41K1700XL FAILURE.

N41A1701X REPLACE LH2 ULLAGE PRESS N02 XDCR PD MPS MPS MPS/LH2 B B C:BASES  
 DESC: COMMAND TO REPLACE LH2 ULL PRESSURE XDCR #2 INDICATION THAT CMD ISSUED.

N41A1702X REPLACE LH2 ULLAGE PRESS N03 XDCR PD MPS MPS MPS/LH2 B B C:BASES  
 DESC: IF PSEUDO IS ON - INDICATES V41K1702XL FAILURE.

PSUEDO FUNCTION DESIGNATOR CONTROL DOCUMENT  
08/28/84

CCNS RLV 90893

FD NAME	NOMENCLATURE	TYPE	CDIS	RSYS	OWN BY	SET BY	USE BY	LOC	SIG	AUTH
N41K1751X	REPLACE L02 ULLAGE PRESS NO1 XDCC DESC: IF PSEUDO IS ON - INDICATES V41K1750XL FAILURE.	PD	MFS	SSME	MFS/LH2	MFS/LH2	MFS/LH2	B	B	C:BASES
N41K1751X	REPLACE L02 ULLAGE PRESS NO2 XDCC DESC: IF PSEUDO IS ON - INDICATES V41K1751XL FAILURE.	PD	MFS	SSME	MFS/LH2	MFS/LH2	MFS/LH2	B	B	C:BASES
N41K1752X	REPLACE L02 ULLAGE PRESS NO3 XDCC DESC: IF PSEUDO IS ON - INDICATES V41K1752XL FAILURE.	PD	MPS	SSME	MFS/LH2	MFS/LH2	MFS/LH2	B	B	C:BASES
N451V031E	CL NOTIF FOR VCH01, FC/PRSD DESC: THIS PSEUDO WILL BE SET TO ON WHEN THE REACTIVE CONTROL LOGIC SEQUENCE VCH01 HAS AN UNPLANNED EXECUTION AND ISSUES COMMANDS. THE INTEGRATION SOFTWARE WILL DISPLAY A MESSAGE TO THE CRT STATING WHICH SEQUENCE EXECUTED, WHEN, AND THE RESPONSIBLE SYSTEM AND THEN SET THE PSEUDO TO OFF.	PD	PRSD	FCPRSD	PRSD/FC	PRSD/FC	PRSD/FC	B	B	C:BASES
N451V032E	CL NOTIF FOR VCH02, FC/PRSD DESC: THIS PSEUDO WILL BE SET TO ON WHEN THE REACTIVE CONTROL LOGIC SEQUENCE VCH02 HAS AN UNPLANNED EXECUTION AND ISSUES COMMANDS. THE INTEGRATION SOFTWARE WILL DISPLAY A MESSAGE TO THE CRT STATING WHICH SEQUENCE EXECUTED, WHEN, AND THE RESPONSIBLE SYSTEM AND THEN SET THE PSEUDO TO OFF.	PD	PRSD	FCPRSD	PRSD/FC	PRSD/FC	PRSD/FC	B	B	C:BASES
N451V033E	CL NOTIF FOR VCH03, FC/PRSD DESC: THIS PSEUDO WILL BE SET TO ON WHEN THE REACTIVE CONTROL LOGIC SEQUENCE VCH03 HAS AN UNPLANNED EXECUTION AND ISSUES COMMANDS. THE INTEGRATION SOFTWARE WILL DISPLAY A MESSAGE TO THE CRT STATING WHICH SEQUENCE EXECUTED, WHEN, AND THE RESPONSIBLE SYSTEM AND THEN SET THE PSEUDO TO OFF.	PD	PRSD	FCPRSD	PRSD/FC	PRSD/FC	PRSD/FC	B	B	C:BASES
N451V034E	CL NOTIF FOR VCR03, FC/PRSD DESC: THIS PSEUDO WILL BE SET TO ON WHEN THE REACTIVE CONTROL LOGIC SEQUENCE VCR03 HAS AN UNPLANNED EXECUTION AND ISSUES COMMANDS. THE INTEGRATION SOFTWARE WILL DISPLAY A MESSAGE TO THE CRT STATING WHICH SEQUENCE EXECUTED, WHEN, AND THE RESPONSIBLE SYSTEM AND THEN SET THE PSEUDO TO OFF.	PD	PRSD	FCPRSD	PRSD/FC	PRSD/FC	PRSD/FC	B	B	C:BASES





SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
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:	:	CLOCK	E	:	:	OR LO	HIGH	:	:	:	:

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CONTENTS

T-20 TO T-9 MINUTES.....	SEQ 001 - SEQ 062
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CUTOFF/ABORT SAFING.....	SEQ 500 - SEQ 633
CONTINGENT PGMS.....	SEQ 700 - SEQ 713
CONCURRENT PROGRAMS.....	SEQ 800 - SEQ 908
GLS OPERATIONS APPENDICES.....	PAGE 124

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DATE 10-35 : GROUND LAUNCH SEQUENCE DESCRIP DOCUMENT - LCD STS 33 : OMI S9005 :
: S : : : : : : : : : : : : : : : : :
: SEQ : TIME : I : FUNC : DISC : : : : : : : : : : : : : : : : : : : : :
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\$ GROUND LAUNCH SEQUENCER OPERATIONS BEGIN WITH GLS INITIALIZATION/ INITIALIZATION TIME IS PER THE CONTROLLING OMI. THIS IS GENERALLY T-2 HOURS. \$

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
001-00					\$ FUEL CELL STATUS CHECK \$						
001-01	02	TK	1	HTR	CUR SENR 1A-TRI	V45X1185E1	OFF	2 OF 2	OR	6.5.1-6	
001-02	02	TK	1	HTR	CUR SENR 1B-TRI	V45X1187E1	OFF			6.5.1-6	
001-03	02	TK	1	HTR	CUR SENR 2A-TRI	V45X1186E1	OFF	2 OF 2		6.5.1-6	
001-04	02	TK	1	HTR	CUR SENR 2B-TRI	V45X1188E1	OFF	LCC-3		6.5.1-6	
001-05	02	TK	2	HTR	CUR SENR 1A-TRI	V45X1285E1	OFF	2 OF 2	OR	6.5.1-6	
001-06	02	TK	2	HTR	CUR SENR 1B-TRI	V45X1287E1	OFF			6.5.1-6	
001-07	02	TK	2	HTR	CUR SENR 2A-TRI	V45X1286E1	OFF	2 OF 2	OR	6.5.1-6	
001-08	02	TK	2	HTR	CUR SENR 2B-TRI	V45X1288E1	OFF	LCC-3		6.5.1-6	
001-09	02	TK	3	HTR	CUR SENR 1A-TRI	V45X1385E1	OFF	2 OF 2	OR	6.5.1-6	AS
001-10	02	TK	3	HTR	CUR SENR 1B-TRI	V45X1387E1	OFF			6.5.1-6	AS
001-11	02	TK	3	HTR	CUR SENR 2A-TRI	V45X1386E1	OFF	2 OF 2	OR	6.5.1-6	AS
001-12	02	TK	3	HTR	CUR SENR 2B-TRI	V45X1388E1	OFF	LCC-3		6.5.1-6	AS
001-13	02	TK	4	HTR	CUR SENR 1A-TRI	V45X1485E1	OFF	2 OF 2	OR	6.5.1-6	AS
001-14	02	TK	4/5	HTR	CUR SENR 1B/1A	V45X1487E1	OFF	OR		6.5.1-6	AS
001-15	02	TK	4	HTR	CUR SENR 2A-TRI	V45X1486E1	OFF	2 OF 2	OR	6.5.1-6	AS
001-16	02	TK	4/5	HTR	CUR SENR 2B/2A	V45X1488E1	OFF	LCC-3		6.5.1-6	AS
001-17					\$ DELETED \$						
001-18					\$ DELETED \$						
001-19					\$ DELETED \$						
001-20					PRSD FCP 1 02 REAC VLV - OPEN	V45X1150E1	ON	LCC-3		6.5.1-5	
001-21					PRSD FCP 1 H2 REAC VLV - OPEN	V45X2150E1	ON	LCC-3		6.5.1-5	
001-22					PRSD FCP 2 02 REAC VLV - OPEN	V45X1155E1	ON	LCC-3		6.5.1-5	
001-23					PRSD FCP 2 H2 REAC VLV - OPEN	V45X2155E1	ON	LCC-3		6.5.1-5	
001-24					PRSD FCP 3 02 REAC VLV - OPEN	V45X1160E1	ON	LCC-3		6.5.1-5	
001-25					PRSD FCP 3 H2 REAC VLV - OPEN	V45X2160E1	ON	LCC-3		6.5.1-5	
001-26					FUEL CELL NO. 1 COOLANT PRESSURE	V45P0147A1	55	75	PSIA	6.5.2-4	
001-27					FUEL CELL NO. 2 COOLANT PRESSURE	V45P0247A1	55	75	PSIA	6.5.2-4	
001-28					FUEL CELL NO. 3 COOLANT PRESSURE	V45P0347A1	55	75	PSIA	6.5.2-4	
001-29					FUEL CELL NO. 1 COOLANT PUMP STAT	V45X0143E1	ON	LCC-3		6.5.2-4	
001-30					FUEL CELL NO. 2 COOLANT PUMP STAT	V45X0243E1	ON	LCC-3		6.5.2-8	
001-31					FUEL CELL NO. 3 COOLANT PUMP STAT	V45X0343E1	ON	LCC-3		6.5.2-8	
001-32					FCP H20 RELIEF NOZZLE TEMP <sup>b</sup>	V45T0456A1	157	235	DEGF	6.5.2-8	
001-33					FC1 H20 RELIEF VALVE TEMP	V45T0412A1	65	NOHI	DEGF	6.5.2-10	
001-34					FC2 H20 RELIEF VALVE TEMP	V45T0422A1	65	NOHI	DEGF	6.5.2-10	
001-35					FC3 H20 RELIEF VALVE TEMP	V45T0432A1	65	NOHI	DEGF	6.5.2-10	



SEQ	TIME	I	FUNG	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
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SEQ	TIME	I	FUNG	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
001-36			CVFY	FCP	H2O RELIEF LINE TEMP	V45I0450A1	65	LCC-1		6.5.2-10	
001-37			CVFY	FCP	FCP NO 1 SUBSTACK 1 DELTA VOLTAGE	V45V0102A1	N0L0	LCC-1		6.5.2-7A	
001-38			CVFY	FCP	FCP NO 1 SUBSTACK 2 DELTA VOLTAGE	V45V0103A1	N0L0	LCC-1		6.5.2-7A	
001-39			CVFY	FCP	FCP NO 1 SUBSTACK 3 DELTA VOLTAGE	V45V0104A1	N0L0	LCC-1		6.5.2-7A	
001-40			CVFY	FCP	FCP NO 2 SUBSTACK 1 DELTA VOLTAGE	V45V0202A1	N0L0	LCC-1		6.5.2-7A	
001-41			CVFY	FCP	FCP NO 2 SUBSTACK 2 DELTA VOLTAGE	V45V0203A1	N0L0	LCC-1		6.5.2-7A	
001-42			CVFY	FCP	FCP NO 2 SUBSTACK 3 DELTA VOLTAGE	V45V0204A1	N0L0	LCC-1		6.5.2-7A	
001-43			CVFY	FCP	FCP NO 3 SUBSTACK 1 DELTA VOLTAGE	V45V0302A1	N0L0	LCC-1		6.5.2-7A	
001-44			CVFY	FCP	FCP NO 3 SUBSTACK 2 DELTA VOLTAGE	V45V0303A1	N0L0	LCC-1		6.5.2-7A	
001-45			CVFY	FCP	FCP NO 3 SUBSTACK 3 DELTA VOLTAGE	V45V0304A1	N0L0	LCC-1		6.5.2-7A	

\$ SRB APU STATUS CHECK \$

SEQ	TIME	I	FUNG	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
002-00			CVFY	BHYD	LH EVENT APU A ISLN VALVE CLOSED	B46X1853X1	ON	1 OF 2		2.1-10	
002-01			CVFY	BHYD	LH EVENT APU A ISLN VALVE OPEN	B46X1851X1	OFF	LCC-3		2.1-10	
002-02			CVFY	BHYD	LH EVENT APU B ISLN VALVE CLOSED	B46X1854X1	ON	1 OF 2		2.1-10	
002-03			CVFY	BHYD	LH EVENT APU B ISLN VALVE OPEN	B46X1852X1	OFF	LCC-3		2.1-10	
002-04			CVFY	BHYD	RH EVENT APU A ISLN VALVE CLOSED	B46X2853X1	ON	1 OF 2		2.1-10	
002-05			CVFY	BHYD	RH EVENT APU A ISLN VALVE OPEN	B46X2851X1	OFF	LCC-3		2.1-10	
002-06			CVFY	BHYD	RH EVENT APU B ISLN VALVE CLOSED	B46X2854X1	ON	1 OF 2		2.1-10	
002-07			CVFY	BHYD	RH EVENT APU B ISLN VALVE OPEN	B46X2852X1	OFF	LCC-3		2.1-10	
002-08			CVFY	BHYD	RH EV APU SEC SP CON VLV CLD SYS B	B46X2863X1	ON	LCC-3		2.1-10	
002-09			CVFY	BHYD	LH EV APU SEC SP CON VLV CLD SYS A	B46X1861X1	ON	LCC-3		2.1-10	
002-10			CVFY	BHYD	LH EV APU SEC SP CON VLV CLD SYS B	B46X1863X1	ON	LCC-3		2.1-10	
002-11			CVFY	BHYD	RH EV APU SEC SP CON VLV CLD SYS A	B46X2861X1	ON	LCC-3		2.1-10	

\$ G/N STATUS CHECK \$

SEQ	TIME	I	FUNG	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
003-00			CVFY	GNS	IMU 1 GOOD	V71X2021B1	ON	LCC-3		6.9.10-26	
003-01			CVFY	GNS	IMU 2 GOOD	V71X3021B1	ON	LCC-3		6.9.10-26	
003-02			CVFY	GNS	IMU 3 GOOD	V71X4021B1	ON	LCC-3		6.9.10-26	
003-03			CVFY	GNS	IMU 1 REDUNDANT RATE FAIL	V95X0033X1	OFF	LCC-3		6.9.10-32	
003-04			CVFY	GNS	IMU 1 INNER RESOLVER NULL FAIL	V95X0034X1	OFF	LCC-3		6.9.10-32	
003-05			CVFY	GNS	IMU 1 VELOCITY LIMIT FAIL	V95X0035X1	OFF	LCC-3		6.9.10-32	
003-06			CVFY	GNS	IMU 1 RESOLVER LIMIT FAIL	V95X0037X1	OFF	LCC-3		6.9.10-32	
003-07			CVFY	GNS	IMU 1 PLATFORM TEMP SAFE	V71X2405X1	ON	LCC-3		6.9.10-29	
003-08			CVFY	GNS	IMU 1 CAPRI TEMP SAFE	V71X2407X1	ON	LCC-3		6.9.10-29	
003-09			CVFY	GNS	IMU 2 REDUNDANT RATE FAIL	V95X1033X1	OFF	LCC-3		6.9.10-32	
003-10			CVFY	GNS	IMU 2 INNER RESOLVER NULL FAIL	V95X1034X1	OFF	LCC-3		6.9.10-32	
003-11			CVFY	GNS	IMU 2 VELOCITY LIMIT FAIL	V95X1035X1	OFF	LCC-3		6.9.10-32	
003-12			CVFY	GNS	IMU 2 RESOLVER LIMIT FAIL	V95X1037X1	OFF	LCC-3		6.9.10-32	

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
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003-13	CVFY GNS		IMU 2	PLATFORM TEMP SAFE	V71X3405X1 ON			LCC-3		6.9.10-29	
003-14	CVFY GNS		IMU 2	CAPRI TEMP SAFE	V71X3407X1 ON			LCC-3		6.9.10-29	
003-15	CVFY GNS		IMU 3	REDUNDANT RATE FAIL	V95X2033X1 OFF			LCC-3		6.9.10-32	
003-16	CVFY GNS		IMU 3	INNER RESOLVER NULL FAIL	V95X2034X1 OFF			LCC-3		6.9.10-32	
003-17	CVFY GNS		IMU 3	VELOCITY LIMIT FAIL	V95X2035X1 OFF			LCC-3		6.9.10-32	
003-18	CVFY GNS		IMU 3	RESOLVER LIMIT FAIL	V95X2037X1 OFF			LCC-3		6.9.10-32	
003-19	CVFY GNS		IMU 3	PLATFORM TEMP SAFE	V71X4405X1 ON			LCC-3		6.9.10-29	
003-20	CVFY GNS		IMU 3	CAPRI SAFE	V71X4407X1 ON			LCC-3		6.9.10-29	
003-21	CVFY GNS		IMU FAILURE		V72X4560X1 OFF			LCC-3		6.9.10-29	
003-22	CVFY GNS		IMU 1	WORD 13 ECHO FAIL	V95X0030X1 OFF			LCC-3		6.9.10-32	
003-23	CVFY GNS		IMU 2	WORD 13 ECHO FAIL	V95X1030X1 OFF			LCC-3		6.9.10-32	
003-24	CVFY GNS		IMU 3	WORD 13 ECHO FAIL	V95X2030X1 OFF			LCC-3		6.9.10-32	
003-25	CVFY GNS		IMU 1	PLATFORM TEMP READY	V71X2404X1 ON			LCC-3		6.9.10-28	
003-26	CVFY GNS		IMU 1	CAPRI TEMP READY	V71X2406X1 ON			LCC-3		6.9.10-28	
003-27	CVFY GNS		IMU 2	PLATFORM TEMP READY	V71X3404X1 ON			LCC-3		6.9.10-28	
003-28	CVFY GNS		IMU 2	CAPRI TEMP READY	V71X3406X1 ON			LCC-3		6.9.10-28	
003-29	CVFY GNS		IMU 3	PLATFORM TEMP READY	V71X4404X1 ON			LCC-3		6.9.10-28	
003-30	CVFY GNS		IMU 3	CAPRI TEMP READY	V71X4406X1 ON			LCC-3		6.9.10-28	
003-31	CVFY GNS		IMU 1	WORD 14 ECHO FAIL	V95X0031X1 OFF			LCC-3		6.9.10-32	
003-32	CVFY GNS		IMU 2	WORD 14 ECHO FAIL	V95X1031X1 OFF			LCC-3		6.9.10-32	
003-33	CVFY GNS		IMU 3	WORD 14 ECHO FAIL	V95X2031X1 OFF			LCC-3		6.9.10-32	
\$ ORB RGA CHECKS \$											
004-00	CVFY GNS		RGA 1	ROLL SRMD IND	V79X1860X1 ON			LCC-3		6.9.10-41	
004-01	CVFY GNS		RGA 1	PITCH SRMD IND	V79X1861X1 ON			LCC-3		6.9.10-41	
004-02	CVFY GNS		RGA 1	YAW SRMD IND	V79X1862X1 ON			LCC-3		6.9.10-41	
004-03	CVFY GNS		RGA 2	ROLL SRMD IND	V79X1865X1 ON			LCC-3		6.9.10-41	
004-04	CVFY GNS		RGA 2	PITCH SRMD IND	V79X1866X1 ON			LCC-3		6.9.10-41	
004-05	CVFY GNS		RGA 2	YAW SRMD IND	V79X1867X1 ON			LCC-3		6.9.10-41	
004-06	CVFY GNS		RGA 3	ROLL SRMD IND	V79X1870X1 ON			LCC-3		6.9.10-41	
004-07	CVFY GNS		RGA 3	PITCH SRMD IND	V79X1871X1 ON			LCC-3		6.9.10-41	
004-08	CVFY GNS		RGA 3	YAW SRMD IND	V79X1872X1 ON			LCC-3		6.9.10-41	
004-09	CVFY GNS		RGA 4	ROLL SRMD IND	V79X1875X1 ON			LCC-3		6.9.10-41	
004-10	CVFY GNS		RGA 4	PITCH SRMD IND	V79X1876X1 ON			LCC-3		6.9.10-41	
004-11	CVFY GNS		RGA 4	YAW SRMD IND	V79X1877X1 ON			LCC-3		6.9.10-41	
\$ KSC SS WATER SYSTEM STATUS CHECK \$											
005-00	K	CVFY	WATR	SS PNEUMATIC PRESSURE	PT1 STATUS	GWDPT01A	1200	1600	PSIG	1	OF 2
005-01	K	CVFY	WATR	SS PNEUMATIC PRESSURE	PT2 STATUS	GWDPT02A	1200	1600	PSIG	LCC-3	3.1-18
											3.1-18

DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S9005 - L :

SEQ	TIME	CD	CLOCK	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
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005-02	K	CVFY	WATR	SS	PRE	L/O	VLV - LS V27 CL IND	GWDXP171E	ON	LCC-1			
005-03	K	CVFY	WATR	SS	PRE	L/O	VLV - LS V26 CL IND	GWDXP173E	ON	LCC-1			
005-04	K	CVFY	WATR	SS	PRE	L/O	VLV - LS V25 CL IND	GWDXP175E	ON	LCC-1			
005-05	K	CVFY	WATR	SS	POST	L/O	VLV - LS V30 CL IND	GWDXP165E	ON	LCC-1			
005-06	K	CVFY	WATR	SS	POST	L/O	VLV - LS V29 CL IND	GWDXP167E	ON	LCC-1			
005-07	K	CVFY	WATR	SS	POST	L/O	VLV - LS V28 CL IND	GWDXP169E	ON	LCC-1			
005-08	K	CVFY	WATR	SS	PRE	L/O	VLVS - OPEN CMD	GWDXP130ER	OFF	LCC-1			
005-09	K	CVFY	WATR	SS	PRE	L/O	VLVS - OPEN CMD	GWDXP132ER	OFF	LCC-1			
005-10	K	CVFY	WATR	SS	POST/L	O	VLVS OP - CMD IND	GWDXP149E	OFF	LCC-1			
005-11	K	CVFY	WATR	SS	PRE/L	O	VLVS OP - CMD IND	GWDXP133E	OFF	LCC-1			
005-12	K	CVFY	WATR	SS	PRE	L/O	VLVS CLOSE CMD IND	GWDXP142E	ON	LCC-1			
005-13	K	CVFY	WATR	SS	POST	L/O	VLVS CLOSE CMD IND	GWDXP143E	ON	LCC-1			
005-14	K	CVFY	WATR	SS	TANK		WATER LEVEL	GWDQPT183A	258.2 NOHI FT	1 OF 2	3.1-19		
005-15	K	CVFY	WATR	SS	TANK		WATER LEVEL	GWDQPT84A	258.2 NOHI FT	LCC-1	3.1-19		
005-16	K	CVFY	WATR	SS	SOL	PWR	BUS ON IND	GWDXP129E	ON	1 OF 2	3.1-21		
005-17	K	CVFY	WATR	SS	SOL	PWR	BUS ON IND	GWDXP153E	ON	LCC-3	3.1-21		

SEQ	TIME	CD	CLOCK	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
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\$ VLS SS WATER SYSTEM STATUS CHECK \$

005-50	V	CVFY	WATR	SSW	PRI		WATER LEVEL IND	XWDQVVF04A	305.1 NOHI FT	1 OF 2			
005-51	V	CVFY	WATR	SSW	SEC		WATER LEVEL IND	XWDQVVF14A	305.1 NOHI FT	LCC-1			
005-52	V	CVFY	WATR	SSW	PRI	GN2	SUPPLY PRESS	XWDPVF24A	1500 NOHI PSIG	1 OF 2			
005-53	V	CVFY	WATR	SSW	SEC	GN2	SUPPLY PRESS	XWDPVF34A	1500 NOHI PSIG	LCC-3			
005-54	V	CVFY	WATR	SSW	PRI	GN2	VLV CLOSING PRESS	XWDPVF44A	1500 NOHI PSIG	1 OF 2			
005-55	V	CVFY	WATR	SSW	SEC	GN2	VLV CLOSING PRESS	XWDPVF54A	1500 NOHI PSIG	LCC-2			

\$ NAV STATUS CHECK \$

006-00	CVFY	NAVA	TACAN	NO	1	POWER	STATUS	V74X0071X1	ON	2 OF 3			6.9.5-2
006-01	CVFY	NAVA	TACAN	NO	2	POWER	STATUS	V74X0081X1	ON	2 OF 3			6.9.5-2
006-02	CVFY	NAVA	TACAN	NO	3	POWER	STATUS	V74X0091X1	ON	LCC-1			6.9.5-2

\$ SSME LEAK CHECK MONITORING \$

007-00	CVFY	SSME	ME-1	OPOV	LOX	SUPPLY	LINE TEMP#1	E41T1151A1	-160 NOHI DEG	1 OF 2			6.2.2-17
007-01	CVFY	SSME	ME-1	OPOV	LOX	SUPPLY	LINE TEMP#2	E41T1152A1	-160 NOHI DEG	LCC-3			6.2.2-17
007-02	CVFY	SSME	ME-2	OPOV	LOX	SUPPLY	LINE TEMP#1	E41T2151A1	-160 NOHI DEG	1 OF 2			6.2.2-17
007-03	CVFY	SSME	ME-2	OPOV	LOX	SUPPLY	LINE TEMP#2	E41T2152A1	-160 NOHI DEG	LCC-3			6.2.2-17
007-04	CVFY	SSME	ME-3	OPOV	LOX	SUPPLY	LINE TEMP#1	E41T3151A1	-160 NOHI DEG	1 OF 2			6.2.2-17



DATE	TIME	CD	CLOCK	SEQ	TIME	DISC	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
12-10-85															
GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33															
008-32					CVFY	DPS	LL2/P1-P2	SRB	PROM BYPASS (SRB)	V91X2833XX	OFF	LCC-4		2.3-14	
008-33					CVFY	DPS	LR1/P1-P2	SRB	PROM BYPASS (SRB)	V91X2835XX	OFF	LCC-4		2.3-14	
008-34					CVFY	DPS	LR2/P1-P2	SRB	PROM BYPASS (SRB)	V91X2837XX	OFF	LCC-4		2.3-14	
008-35					CVFY	DPS	FF1	NSP	DISCRETES BYPASS	V91X2900XX	OFF	LCC-3		6.9.3-5	
008-36					CVFY	DPS	FF3	NSP	DISCRETES BYPASS	V91X2901XX	OFF	LCC-3		6.9.3-5	
008-37					CVFY	DPS	FF1	NSP	DATA BYPASS	V91X2902XX	OFF	1 OF 2		6.9.3-5	
008-38					CVFY	DPS	FF3	NSP	DATA BYPASS	V91X2903XX	OFF	LCC-3		6.9.3-5	
008-39					CVFY	DPS	FF1	MDM	RETURN WORD BYPASS(HFE)	V91X2904XX	OFF	LCC-3		6.9.3-6	
008-40					CVFY	DPS	FF2	MDM	RETURN WORD BYPASS(HFE)	V91X2905XX	OFF	LCC-3		6.9.3-6	
008-41					CVFY	DPS	FF3	MDM	RETURN WORD BYPASS(HFE)	V91X2906XX	OFF	LCC-3		6.9.3-6	
008-42					CVFY	DPS	FF4	MDM	RETURN WORD BYPASS(HFE)	V91X2907XX	OFF	LCC-3		6.9.3-6	
008-43					CVFY	DPS	FA2	HYDR	SYS PRESS C BYPASS	V91X2917XX	OFF	LCC-3		6.9.3-6	
008-44					CVFY	DPS	FA3	OMS	CHAMBER PRESS LEFT BYPASS	V91X2918XX	OFF	LCC-3		6.9.3-6	
008-45					CVFY	DPS	FA4	OMS	CHAMBER PRESS RIGHT BYP	V91X2919XX	OFF	LCC-3		6.9.3-6	
008-46					CVFY	DPS	FA1	MDM	RETURN WORD BYPASS(HFE)	V91X2920XX	OFF	LCC-3		6.9.3-6	
008-47					CVFY	DPS	FA2	MDM	RETURN WORD BYPASS(HFE)	V91X2921XX	OFF	LCC-3		6.9.3-6	
008-48					CVFY	DPS	FA3	MDM	RETURN WORD BYPASS(HFE)	V91X2922XX	OFF	LCC-3		6.9.3-6	
008-49					CVFY	DPS	FA4	MDM	RETURN WORD BYPASS(HFE)	V91X2923XX	OFF	LCC-3		6.9.3-6	
008-50					CVFY	DPS	FF1	IMU	DSCRS BYPASS (IMU INPUT)	V91X2924XX	OFF	LCC-3		6.9.3-6	
008-51					CVFY	DPS	FF2	IMU	DSCRS BYPASS (IMU INPUT)	V91X2925XX	OFF	LCC-3		6.9.3-6	
008-52					CVFY	DPS	FF3	IMU	DSCRS BYPASS (IMU INPUT)	V91X2926XX	OFF	LCC-3		6.9.3-6	
008-53					CVFY	DPS	EIU1/P1	DATA	BYPASS (HFE INPUT)	V91X2928XX	OFF	LCC-3		6.9.3-6	
008-54					CVFY	DPS	EIU2/P1	DATA	BYPASS (HFE INPUT)	V91X2931XX	OFF	LCC-3		6.9.3-6	
008-55					CVFY	DPS	EIU3/P1	DATA	BYPASS (HFE INPUT)	V91X2934XX	OFF	LCC-3		6.9.3-6	
008-56									\$ DELETED \$						
008-57									\$ DELETED \$						
008-58					CVFY	DPS	GPC 1	TIME	SOURCE GPC/MTU	V91X1716XX	ON	LCC-3			
008-59					CVFY	DPS	GPC 2	TIME	SOURCE GPC/MTU	V91X1717XX	ON	LCC-3			
008-60					CVFY	DPS	GPC 3	TIME	SOURCE GPC/MTU	V91X1718XX	ON	LCC-3			
008-61					CVFY	DPS	GPC 4	TIME	SOURCE GPC/MTU	V91X1719XX	ON	LCC-3			
008-62					CVFY	DPS	GPC 1	IMP	SOURCE	V91Q1710CX	B010	LCC-3			
008-63					CVFY	DPS	GPC 2	IMP	SOURCE	V91Q1711CX	B010	LCC-3			
008-64					CVFY	DPS	GPC 3	IMP	SOURCE	V91Q1712CX	B010	LCC-3			
008-65					CVFY	DPS	GPC 4	IMP	SOURCE	V91Q1713CX	B010	LCC-3			
008-66					CVFY	DPS	DEU #1	BITE	STATUS PRESENT B14	V92X6722XX	OFF	LCC-3			
008-67					CVFY	DPS	DEU #2	BITE	STATUS PRESENT B14	V92X6781XX	OFF	LCC-3			
008-68					CVFY	DPS	GPC1	MMU1	READY	V92X7368XX	ON	3 OF 4		6.9.3-10	
008-69					CVFY	DPS	GPC2	MMU1	READY	V92X7428XX	ON	3 OF 4		6.9.3-10	
008-70					CVFY	DPS	GPC3	MMU1	READY	V92X7488XX	ON	3 OF 4		6.9.3-10	
008-71					CVFY	DPS	GPC4	MMU1	READY	V92X7548XX	ON	LCC-3		6.9.3-10	
008-72					CVFY	DPS	GPC1	MMU2	READY	V92X7569XX	ON	3 OF 4		6.9.3-10	

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
008-73			CVFY	DPS	GPC2 MMU2 READY	V92X7429XX ON		3 OF 4			6.9.3-10
008-74			CVFY	DPS	GPC3 MMU2 READY	V92X7489XX ON		3 OF 4			6.9.3-10
008-75			CVFY	DPS	GPC4 MMU2 READY	V92X7549XX ON		LCC-3			6.9.3-10
008-76			CVFY	DPS	GPC1 MMU1 IPL SELECT	V92X7366XX OFF		2 OF 4			6.9.3-11
008-77			CVFY	DPS	GPC2 MMU1 IPL SELECT	V92X7426XX OFF		2 OF 4			6.9.3-11
008-78			CVFY	DPS	GPC3 MMU1 IPL SELECT	V92X7486XX OFF		2 OF 4			6.9.3-11
008-79			CVFY	DPS	GPC4 MMU1 IPL SELECT	V92X7546XX OFF		LCC-3			6.9.3-11
008-80			CVFY	DPS	GPC1 MMU2 IPL SELECT	V92X7367XX OFF		2 OF 4			6.9.3-11
008-81			CVFY	DPS	GPC2 MMU2 IPL SELECT	V92X7427XX OFF		2 OF 4			6.9.3-11
008-82			CVFY	DPS	GPC3 MMU2 IPL SELECT	V92X7487XX OFF		2 OF 4			6.9.3-11
008-83			CVFY	DPS	GPC4 MMU2 IPL SELECT	V92X7547XX OFF		LCC-3			6.9.3-11

\$ SRB ORDNANCE SYSTEMS STATUS CHECK \$											
SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
009-00			CVFY	BELE	LH VOLTAGE OPERATIONAL BUS A	B76V1600H	24.8	32.0	V	1 OF 2	2.3-4
009-01			CVFY	BELE	LH VOLTAGE OPERATIONAL BUS A	B76V1600C1	25.5	31.3	V	LCC-3	2.3-4
009-02			CVFY	BELE	RH VOLTAGE OPERATIONAL BUS A	B76V2600H	24.8	32.0	V	1 OF 2	2.3-4
009-03			CVFY	BELE	RH VOLTAGE OPERATIONAL BUS A	B76V2600C1	25.5	31.3	V	LCC-3	2.3-4
009-04			CVFY	BELE	LH VOLTAGE OPERATIONAL BUS B	B76V1601H	24.8	32.0	V	1 OF 2	2.3-4
009-05			CVFY	BELE	LH VOLTAGE OPERATIONAL BUS B	B76V1601C1	25.5	31.3	V	LCC-3	2.3-4
009-06			CVFY	BELE	RH VOLTAGE OPERATIONAL BUS B	B76V2601H	24.8	32.0	V	1 OF 2	2.3-4
009-07			CVFY	BELE	RH VOLTAGE OPERATIONAL BUS B	B76V2601C1	25.5	31.3	V	LCC-3	2.3-4
009-08			CVFY	BPYR	RH VOLTAGE FWD THR PIN PIC CAP A	B55V2605C1	NOL0	1.5	V	LCC-3	2.6-4
009-09			CVFY	BPYR	RH VOLTAGE FWD THR PIN PIC CAP B	B55V1606C1	NOL0	1.5	V	LCC-3	2.6-4
009-10			CVFY	BPYR	RH VOLTAGE FWD THR PIN PIC CAP A	B55V2606C1	NOL0	1.5	V	LCC-3	2.6-4
009-11			CVFY	BPYR	RH VOLTAGE FWD THR PIN PIC CAP B	B55V1607C1	NOL0	1.5	V	LCC-3	2.6-5
009-12			CVFY	BPYR	RH VOLTAGE AFT UPR BRC PIC CAP A	B55V2607C1	NOL0	1.5	V	LCC-3	2.6-5
009-13			CVFY	BPYR	LH VOLTAGE AFT UPR BRC PIC CAP B	B55V1608C1	NOL0	1.5	V	LCC-3	2.6-5
009-14			CVFY	BPYR	LH VOLTAGE AFT MID BRC PIC CAP A	B55V1609C1	NOL0	1.5	V	LCC-3	2.6-5
009-15			CVFY	BPYR	RH VOLTAGE AFT MID BRC PIC CAP B	B55V2609C1	NOL0	1.5	V	LCC-3	2.6-5
009-16			CVFY	BPYR	RH VOLTAGE AFT MID BRC PIC CAP A	B55V2610C1	NOL0	1.5	V	LCC-3	2.6-5
009-17			CVFY	BPYR	RH VOLTAGE AFT LWR BRC PIC CAP A	B55V1611C1	NOL0	1.5	V	LCC-3	2.6-5
009-18			CVFY	BPYR	RH VOLTAGE AFT LWR BRC PIC CAP B	B55V2611C1	NOL0	1.5	V	LCC-3	2.6-5
009-19			CVFY	BPYR	LH VOLTAGE AFT LWR BRC PIC CAB A	B55V1612C1	NOL0	1.5	V	LCC-3	2.6-5
009-20			CVFY	BPYR	RH VOLTAGE AFT LWR BRC PIC CAB B	B55V2612C1	NOL0	1.5	V	LCC-3	2.6-5
009-21			CVFY	BPYR	LH VOLTAGE FWD SEP MOT PIC CAP A	B55V1613C1	NOL0	1.5	V	LCC-3	2.6-5
009-22			CVFY	BPYR	LH VOLTAGE FWD SEP MOT PIC CAP B	B55V1614C1	NOL0	1.5	V	LCC-3	2.6-6
009-23			CVFY	BPYR	RH VOLTAGE FWD SEP MOT PIC CAP A	B55V2614C1	NOL0	1.5	V	LCC-3	2.6-6
009-24			CVFY	BPYR	LH VOLTAGE AFT SEP MOT PIC CAP B	B55V1615C1	NOL0	1.5	V	LCC-3	2.6-7
009-25			CVFY	BPYR	RH VOLTAGE AFT SEP MOT PIC CAP A	B55V2615C1	NOL0	1.5	V	LCC-3	2.6-7

DATE	TIME	CD	CLOCK	SEQ	TIME	CD	CLOCK	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE	OMI	S9005	L
12-10-85										GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33									
009-26										LH VOLTAGE AFT SEP MOT PIC CAP B	B55V1616C1 N0L0	1.5	V	LCC-3					2.6-7
009-27										RH VOLTAGE AFT SEP MOT PIC CAP B	B55V2616C1 N0L0	1.5	V	LCC-3					2.6-7
009-28										LH VOLTAGE NOSE CAP RLSE PIC CAP	B55V1617C1 N0L0	1.5	V	LCC-3					2.7-6
009-29										RH VOLTAGE NOSE CAP RLSE PIC CAP	B55V2617C1 N0L0	1.5	V	LCC-3					2.7-6
009-30										LH VOLTAGE FRUSTRUM RLSE PIC CAP	B55V1618C1 N0L0	1.5	V	LCC-3					2.7-7
009-31										RH VOLTAGE FRUSTRUM RLSE PIC CAP	B55V2618C1 N0L0	1.5	V	LCC-3					2.7-7
009-32										LH VOLTAGE MN CHUTE DISC PIC CAP	B55V1620C1 N0L0	1.5	V	LCC-3					2.7-4
009-33										RH VOLTAGE MN CHUTE DISC PIC CAP	B55V2620C1 N0L0	1.5	V	LCC-3					2.7-4
009-34										LH VOLTAGE NOZ EXT SEV PIC CAP	B55V1619C1 N0L0	1.5	V	LCC-3					2.7-5
009-35										RH VOLTAGE NOZ EXT SEV PIC CAP	B55V2619C1 N0L0	1.5	V	LCC-3					2.7-5
010-00										\$ EPDC STATUS CHECK \$									
010-01										\$ DELETED \$									
010-02										AC BUS 1 PHASE A VOLTS	V76V1500A1 115	120	VAC	LCC-3					6.9.7-6
010-03										\$ DELETED \$									
010-04										AC BUS 1 PHASE B VOLTS	V76V1501A1 115	120	VAC	LCC-3					6.9.7-6
010-05										\$ DELETED \$									
010-06										AC BUS 1 PHASE C VOLTS	V76V1502A1 115	120	VAC	LCC-3					6.9.7-6
010-07										\$ DELETED \$									
010-08										AC BUS 2 PHASE A VOLTS	V76V1600A1 115	120	VAC	LCC-3					6.9.7-6
010-09										\$ DELETED \$									
010-10										AC BUS 2 PHASE B VOLTS	V76V1601A1 115	120	VAC	LCC-3					6.9.7-6
010-11										\$ DELETED \$									
010-12										AC BUS 2 PHASE C VOLTS	V76V1602A1 115	120	VAC	LCC-3					6.9.7-6
010-13										\$ DELETED \$									
010-14										AC BUS 3 PHASE A VOLTS	V76V1700A1 115	120	VAC	LCC-3					6.9.7-6
010-15										\$ DELETED \$									
010-16										AC BUS 3 PHASE B VOLTS	V76V1701A1 115	120	VAC	LCC-3					6.9.7-6
010-17										\$ DELETED \$									
010-18										AC BUS 3 PHASE C VOLTS	V76V1702A1 115	120	VAC	LCC-3					6.9.7-6
010-19										MN BUS A VOLTAGE	V76V0100A1 N0L0	32.0	V	1 OF 2					6.5.2-2
010-20										FUEL CELL NO 1 VOLTAGE	V45V0100A1 N0L0	32.0	V	LCC-3					6.5.2-2
010-21										\$ DELETED \$									
010-22										MN BUS B VOLTAGE	V76V0200A1 N0L0	32.0	V	1 OF 2					6.5.2-2
010-23										FUEL CELL NO 2 VOLTAGE	V45V0200A1 N0L0	32.0	V	LCC-3					6.5.2-2
010-24										\$ DELETED \$									
010-25										MN BUS C VOLTAGE	V76V0300A1 N0L0	32.0	V	1 OF 2					6.5.2-2
010-26										FUEL CELL NO 3 VOLTAGE	V45V0300A1 N0L0	32.0	V	LCC-3					6.5.2-2
010-27										L SRB BUS A BACKUP PWR ON	V76X6775E1 OFF			LCC-3					6.9.7-9
										R SRB BUS A BACKUP PWR ON	V76X6776E1 OFF			LCC-3					6.9.7-9
										L SRB BUS B BACKUP PWR ON	V76X6777E1 OFF			LCC-3					6.9.7-9
										R SRB BUS B BACKUP PWR ON	V76X6778E1 OFF			LCC-3					6.9.7-9

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
:	CD	:	:	:	:	:	:	:	:	:
:	CLOCK	:	:	:	:	DESIGNATOR	LO	:	:	PAGE
:	:	:	:	:	:	OR	HIGH	:	:	:
:	:	:	:	:	:	:	:	UNIT	:	:

010-28	CVFY EPDC	AFT	PCA-5	VOLTAGE			32.0	V	1 OF 2	2.3-5
010-29	CVFY EPDC	AFT	PCA-6	VOLTAGE			32.0	V	LCC-3	2.3-5
010-30		\$	DELETED	\$						
010-31		\$	DELETED	\$						
010-32	CVFY EPDC	MAIN	BUS A	CONT BUS	AB2/CA2	RPC			2 OF 3	6.9.7-4
010-33	CVFY EPDC	MAIN	BUS B	CONT BUS	AB2/BC2	RPC			2 OF 3	6.9.7-4
010-34	CVFY EPDC	MAIN	BUS C	CONT BUS	BC2/CA2	RPC			LCC-4	6.9.7-4
010-35	CVFY EPDC	MAIN	BUS A	CONT BUS	AB3/CA3	RPC			2 OF 3	6.9.7-4
010-36	CVFY EPDC	MAIN	BUS B	CONT BUS	AB3/BC3	RPC			2 OF 3	6.9.7-4
010-37	CVFY EPDC	MAIN	BUS C	CONT BUS	BC3/CA3	RPC			LCC-4	6.9.7-4
010-38	CVFY EPDC	MAIN	BUS B	CONT BUS	AB1/BC1	RPC			2 OF 3	6.9.7-4
010-39	CVFY EPDC	MAIN	BUS C	CONT BUS	BC1/CA1	RPC			2 OF 3	6.9.7-4
010-40	CVFY EPDC	MAIN	BUS A	CONT BUS	AB1/CA1	RPC			LCC-4	6.9.7-4
010-41		\$	010-41	MOVED TO	010-34	010-34				
010-42		\$	DELETED	\$						
010-43		\$	010-43	MOVED TO	010-37	010-37				
010-44		\$	DELETED	\$						
010-45		\$	010-45	MOVED TO	010-40	010-40				
010-46		\$	DELETED	\$						
010-47		\$	DELETED	\$						
010-48	CVFY EPDC	FC1	TO	ESS1BC	SWITCH	ON			2 OF 3	6.9.7-11
010-49	CVFY EPDC	MNB	TO	ESS1BC	RPC	ON			2 OF 3	6.9.7-11
010-50	CVFY EPDC	MNC	TO	ESS1BC	RPC	ON			LCC-3	6.9.7-11
010-51	CVFY EPDC	FC2	TO	ESS2CA	SWITCH	ON			2 OF 3	6.9.7-11
010-52	CVFY EPDC	MNC	TO	ESS2CA	RPC	ON			2 OF 3	6.9.7-11
010-53	CVFY EPDC	MNA	TO	ESS2CA	RPC	ON			LCC-3	6.9.7-11
010-54	CVFY EPDC	FC3	TO	ESS3AB	SWITCH	ON			2 OF 3	6.9.7-11
010-55	CVFY EPDC	MNA	TO	ESS3AB	RPC	ON			2 OF 3	6.9.7-11
010-56	CVFY EPDC	MNB	TO	ESS3AB	RPC	ON			LCC-3	6.9.7-11

\$ COMM STATUS CHECK \$										
011-00	CVFY COMM	NSP 1	-	FRAME	SYNC	LOCK			1 OF 2	6.9.5-7
011-01	CVFY COMM	NSP 2	-	FRAME	SYNC	LOCK			LCC-3	6.9.5-7
011-02	CVFY COMM	GCIL	ACTIVE						1 OF 3	6.9.5-6
011-03	CVFY COMM	GCIL	POWER	SUPPLY	1	ON			1 OF 3	6.9.5-6
011-04	CVFY COMM	GCIL	POWER	SUPPLY	2	ON			LCC-3	6.9.5-6

\$ INSTRUMENTATION STATUS CHECK \$										
012-00	CVFY INST	PCMMU	BSR	PWR	GOOD				LCC-3	6.9.6-2



SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
:	CD	:	:	:	DESIGNATOR	SINGL	:	:	PAGE
:	CLOCK	:	:	:	OR	LO	HIGH	UNIT	:

012-01	CVFY INST	PCMMU	BSR	MIU	GOOD	V75X2122D1	ON	LCC-3	6.9.6-2
012-02	CVFY INST	PCMMU	BSR	PROM	PAR	GOOD	ON	LCC-3	6.9.6-2
012-03	CVFY INST	PCMMU	BSR	128	KBS	DNLK	GOOD	LCC-3	6.9.6-2
012-04	CVFY INST	PCMMU	BSR	64	KBS	DNLK	GOOD	LCC-3	6.9.6-2
012-05	CVFY INST	PCMMU	BSR	128	KBS	ILM	PAR	LCC-3	6.9.6-2
012-06	CVFY INST	PCMMU	BSR	128	KBPS	COUNTERS	GOOD	LCC-3	6.9.6-2
012-07	CVFY INST	PCMMU	BSR	64	KBS	COUNTERS	GOOD	LCC-3	6.9.6-2
012-08	CVFY INST	PCMMU	BSR	INPUT	DATA	VALID	ON	LCC-3	6.9.6-2
012-09	CVFY INST	OI	RAM	PARITY	GOOD	V75X2131D1	ON	LCC-3	6.9.6-2
012-10	CVFY INST	PCMMU	BSR	PDI	RAM	GOOD	ON	LCC-3	6.9.6-2
012-11	CVFY INST	PCMMU	BSR	TOGGLE	BUFFER	GOOD	ON	LCC-3	6.9.6-2
012-12	CVFY INST	PCMMU	BSR	NO	RESPONSE	GPC	ON	LCC-3	6.9.6-2
012-13									

\$ DELETED \$

\$ ENVIRONMENTAL CONTROL STATUS CHECK \$

013-00	CVFY ECLS	O2	PARTIAL	PRESSURE-A		V61P2511A1	2.8	3.43	PSIA	2 OF 3	6.8.1-17
013-01	CVFY ECLS	O2	PARTIAL	PRESSURE-B		V61P2513A1	2.8	3.43	PSIA	2 OF 3	6.8.1-17
013-02	CVFY ECLS	O2	PARTIAL	PRESSURE-C		V61P2515A1	2.8	3.43	PSIA	LCC-1	6.8.1-17
013-03	CVFY ECLS	CABIN	FAN	DELTA	PRESS	V61P2556A1	4.2	6.8	INH20	LCC-3	6.8.1-19
013-04	CVFY ECLS	H2O	LOOP	1	PUMP	OUTLET	PRESS	NOHI	PSIA	1 OF 3	6.8.1-23
013-05	CVFY ECLS	H2O	LOOP	1	INTERCHANGER	FLOW		NOHI	LBM/HR	1 OF 3	6.8.1-23
013-06	CVFY ECLS	H2O	LOOP	1	DUMP	DELTA	PRESS	46	PSID	OR	6.8.1-23
013-07	CVFY ECLS	H2O	LOOP	2	PUMP	OUTLET	PRESS	73	PSIA	1 OF 3	6.8.1-23
013-08	CVFY ECLS	H2O	LOOP	2	INTERCHANGER	FLOW		NOHI	LBM/HR	1 OF 3	6.8.1-23
013-09	CVFY ECLS	H2O	LOOP	2	PUMP	DELTA	PRESS	46	PSID	LCC-3	6.8.1-23
013-10	CVFY ECLS	AVIONICS	BAY	1	DELTA	PRESS		4.00	INH20	LCC-3	6.8.1-25
013-11	CVFY ECLS	AVIONICS	BAY	2	DELTA	PRESS		4.00	INH20	LCC-3	6.8.1-25
013-12	CVFY ECLS	AVIONICS	BAY	3	DELTA	PRESS		4.50	INH20	LCC-3	6.8.1-25
013-13	CVFY ECLS	IMU	FAN	B	NORM	SPD				3 OF 3	6.8.1-28
013-14	CVFY ECLS	IMU	FAN	A	NORM	SPD				3 OF 3	6.8.1-28
013-15	CVFY ECLS	IMU	FAN	C	NORM	SPD				OR	6.8.1-28
013-16	CVFY ECLS	IMU	DELTA	PRESS		V61P2869A1	3	5	INH20	LCC-3	6.8.1-28
013-17	CVFY ECLS	SMOKE	DET-RTN	AIR	TO	CAB	HX			LCC-3	6.8.2-9
013-18	CVFY ECLS	SMOKE	DETECTOR-LEFT	FLIGHT	DECK	V62X0596E1	OFF			LCC-3	6.8.2-9
013-19	CVFY ECLS	SMOKE	DETECTOR-RIGHT	FLIGHT	DECK	V62X0606E1	OFF			LCC-3	6.8.2-9
013-20	CVFY ECLS	SMOKE	DETECTOR-A	AV	BAY-2	V62X0607E1	OFF			LCC-3	6.8.2-10
013-21	CVFY ECLS	SMOKE	DETECTOR-B	AV	BAY-2	V62X0610E1	OFF			LCC-3	6.8.2-10
013-22	CVFY ECLS	FIRE	BOTTLE	AV	BAY	1	FULL/EMPTY			LCC-3	6.8.2-11

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PL
:	:	:	:	:	:	:	:	:	:	:	:
:	CD	T	:	:	:	DESIGNATOR	SINGL	:	:	PAGE	:
:	CLOCK	E	:	:	:	OR	LO	HIGH	UNIT	:	:
:	:	:	:	:	:	:	:	:	:	:	:
013-23	CVFY	ECLS	SMOKE	DETECTOR-A	AV BAY-1	V62X0620E1	OFF	LCC-3		6.8.2-10	
013-24	CVFY	ECLS	SMOKE	DETECTOR-B	AV BAY-1	V62X0621E1	OFF	LCC-3		6.8.2-10	
013-25	CVFY	ECLS	FIRE	BOTTLE	AV BAY 2 FULL/EMPTY	V62X0622E1	OFF	LCC-3		6.8.2-11	
013-26	CVFY	ECLS	SMOKE	DETECTOR-A	AV BAY 3	V62X0630E1	OFF	LCC-3		6.8.2-10	
013-27	CVFY	ECLS	SMOKE	DETECTOR-B	AV BAY 3	V62X0631E1	OFF	LCC-3		6.8.2-10	
013-28	CVFY	ECLS	FIRE	BOTTLE	AV BAY 3 FULL/EMPTY	V62X0632E1	OFF	LCC-3		6.8.2-11	
013-29	CVFY	ECLS	PRI	FLASH	EVAP H2O ACCUM NORM	V63X1751E1	ON	1 OF 2		6.8.2-12	
013-30	CVFY	ECLS	SEC	FLASH	EVAP H2O ACCUM NORM	V63X1761E1	ON	LCC-1		6.8.2-12	
013-31	CVFY	ECLS	SYS 1	N2	SUPPLY PRESSURE	V61P2301A1	100	3300	PSIA	6.8.1-10	
013-32	CVFY	ECLS	SYS 2	N2	SUPPLY PRESSURE	V61P2309A1	100	3300	PSIA	6.8.1-10	
013-33	CVFY	ECLS	SYS 1	N2	TANK 1 TEMP	V61T2406A1	20	150	DEGF	6.8.1-10	
013-34	CVFY	ECLS	SYS 1	N2	TANK 2 TEMP	V61T2407A1	20	150	DEGF	6.8.1-10	
013-35	CVFY	ECLS	SYS 2	N2	TANK 1 TEMP	V61T2408A1	20	150	DEGF	6.8.1-10	
013-36	CVFY	ECLS	SYS 2	N2	TANK 2 TEMP	V61T2409A1	20	150	DEGF	6.8.1-10	
013-37	CVFY	ECLS	FCL 1	INTERCHANGER	FLOWRATE	V63R1100A1	2150	NOHI	LBM/HR	6.8.3-2	PL
013-38	CVFY	ECLS	FCL 1	PAYLOAD	HX FLOWRATE	V63R1103A1	190	NOHI	LBM/HR	6.8.3-2	PL
013-39	CVFY	ECLS	FCL 1	COLDPLATE	NETWORK FLOWRATE	V63R1105A1	265	NOHI	LBM/HR	6.8.3-2	PL
013-40	CVFY	ECLS	FCL 1	PUMP	INLET PRESS	V63P1108A1	92	117	PSIA	6.8.3-2	PL
013-41	CVFY	ECLS	FCL 1	ACCUMULATOR	QUANTITY	V63Q1130A1	23	39	PCT	6.8.3-4	
013-42	CVFY	ECLS	NH3	SYS A	TANK TEMP	V63T1180A1	-50	170	DEGF	6.8.3-6	
013-43	CVFY	ECLS	NH3	SYS B	TANK TEMP	V63T1188A1	-50	170	DEGF	6.8.3-6	
013-44	CVFY	ECLS	NH3	SYS A	TANK PRESS	V63P1196A1	5	505	PSIA	6.8.3-6	
013-45	CVFY	ECLS	NH3	SYS B	TANK PRESS	V63P1197A1	5	505	PSIA	6.8.3-6	
013-46	CVFY	ECLS	FCL 1	EVAP	OUT TEMP	V63T1207A1	30	50	DEGF	6.8.3-9	
013-47	CVFY	ECLS	FCL 2	EVAP	OUT TEMP	V63T1407A1	30	50	DEGF	6.8.3-9	
013-48	CVFY	ECLS	FCL 2	INTERCHANGER	FLOWRATE	V63R1300A1	2150	NOHI	LBM/HR	6.8.3-2	PL
013-49	CVFY	ECLS	FCL 2	PAYLOAD	HX FLOWRATE	V63R1303A1	190	NOHI	LBM/HR	6.8.3-2	PL
013-50	CVFY	ECLS	FCL 2	COLDPLATE	NETWORK FLOWRATE	V63R1305A1	265	NOHI	LBM/HR	6.8.3-2	PL
013-51	CVFY	ECLS	FCL 2	PUMP	INLET PRESS	V63P1308A1	77	100	PSIA	6.8.3-4	
013-52	CVFY	ECLS	FCL 2	ACCUMULATOR	QUANTITY	V63Q1330A1	23	39	PCT	6.8.3-4	

\$ KSC PVD STATUS CHECKS \$

014-00	K	CVFY	PVD	ORB	FWD	I/F	PRESS				
014-01	K	CVFY	PVD	ORB	FWD	DUCT	PRESS	86	INH20	1 OF 2	3.1-4
014-02	K	CVFY	PVD	ORB	PLB	I/F	PRESS	96	INH20	LCC-3	3.1-4
014-03	K	CVFY	PVD	ORB	PLB	DUCT	PRESS	86	INH20	1 OF 2	3.1-5
014-04	K	CVFY	PVD	ORB	AFT	I/F	PRESS	96	INH20	LCC-3	3.1-5
								86	INH20	1 OF 2	3.1-3



DATE 12 5 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S9005 :  
 SEQ : TIME : I : FUNC : DISC : NOMENCLATURE : FUNCTION : VALUE : ELSE : DURATION : LCC : S :  
 : CD : T : : : : : : : : : : : : S :  
 : : CLOCK : E : : : : : : : : : : : : PAGE : : : : S :  
 : : : : : : : : : : : : : : : : : : F :  
 : : : : : : : : : : : : : : : : : : D :  
 : : : : : : : : : : : : : : : : : : :

016-05	CVFY	APU	APU3	INJECT	TUBE	TEMP	V46T0374A1	204	436	DEGF	LCC-2	6.6-13
\$ APU FUEL PUMP SEAL CHECK \$												
016-06	CVFY	APU	APU 1	FU	PMP	DRN LN P-1	V46P0190A1	NOL0	25	PSIA	1 OF 2	6.6-32
016-07	CVFY	APU	APU 1	FU	PMP	DRN LN P-2	V46P0191A1	NOL0	25	PSIA	LCC-3	6.6-32
016-08	CVFY	APU	APU 2	FU	PMP	DRN LN P-1	V46P0290A1	NOL0	25	PSIA	1 OF 2	6.6-32
016-09	CVFY	APU	APU 2	FU	PMP	DRN LN P-2	V46P0291A1	NOL0	25	PSIA	LCC-3	6.6-32
016-10	CVFY	APU	APU 3	FU	PMP	DRN LN P-1	V46P0390A1	NOL0	25	PSIA	1 OF 2	6.6-32
016-11	CVFY	APU	APU 3	FU	PMP	DRN LN P-2	V46P0391A1	NOL0	25	PSIA	LCC-3	6.6-32
\$ APU GEARBOX GN2 SUPPLY CK \$												
016-12	CVFY	APU	APU 1	GN2	BOTTLE	PRESS	V46P0152A1	115	NOHI	PSIA	LCC-3	6.6-25
016-13	CVFY	APU	APU 2	GN2	BOTTLE	PRESS	V46P0252A1	115	NOHI	PSIA	LCC-3	6.6-25
016-14	CVFY	APU	APU 3	GN2	BOTTLE	PRESS	V46P0352A1	115	NOHI	PSIA	LCC-3	6.6-25

```

: DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S9005 - L :
:
: SEQ : TIME : I : FUNC : DISC : : FUNCTION : : VALUE : : ELSE : : DURATION : : LCC : : : S :
: : CD : T : : : : : : DESIGNATOR : SINGL : : : : : : : : : : : S :
: : CLOCK : E : : : : : : : OR LO : HIGH : UNIT : : : : : : : : : : : F :
: : : : : : : : : : : : : : : : : : : : : : : : : : : : : D :
: : : : : : : : : : : : : : : : : : : : : : : : : : : : :

```

```

$*****INTG SET CDT INTERRUPT TO INITIATE TERMINATE LOX REPLENISH*****
*
*AT INT CMD INTG START G013 TERMINATE LOX REPLENISH G013 ON *
*
*****$

```

```

$*****INTG SET CDI INTERRUPT TO INITIATE CENTAUR PRESSURIZATION *****
*
*AT INT CMD CINTG START G017 CENTAUR PRESSURIZATION G017 ON *
*
*****$

```



```

: : DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S90C5 - L :
: : : : : : : : : : : : : : : : :
: : SEQ : TIME : I : FUNC : DISC : NOMENCLATURE : FUNCTION : VALUE : ELSE : DURATION : LCC : : S :
: : : : : : : : : : : : : : : : : : : : : : :
: : : CD : T : : : : : : : : : : : : : : : : : :
: : : CLOCK : E : : : : : : : : : : : : : : : : : : F :
: : : : : : : : : : : : : : : : : : : : : : : : D :
: : : : : : : : : : : : : : : : : : : : : : :

```

```

022-00 -21:00 VFY INTG ONE-SHOT DATA ACKNOWLEDGE N03IS016E OFF WAIT

```

```

MSG INTG ONE SHOT DATA XFER COMPLETE
MSG INTG GO FOR OPS 101 TRANSITION

```

```

023-00 -20:00
023-01 CMD INIG COUNDOWN CLOCK HOLD
$ T-20 MINUTE BUILT IN HOLD $

```

```

CMD INTG SET 10 MIN HOLD TIMER TIMER 10
VFY INTG HOLD TIMER EXPIRED TIMER
VFY INTG ONE-SHOT DATA ACKNOWLEDGE N03IS016E OFF MIN/SEC WAIT
VFY GNS PREFLIGHT ALIGN COMPLETE V95X0010X1 ON WAIT

```

```

$ INTEGRATION CONSOLE FAILURE FROM T-20 MIN TO T-9 MIN WILL$
$ RESULT IN COUNDOWN HOLD AT T-9 MIN.$

```

```

024-00 -20:00 CVFY INTG INTEGRATION CONSOLE GO MODE SINTGGO ON HOLD AT T-9 MIN
024-01 CMD INTG COUNDOWN CLOCK COUNT

```

```

025-00 -19:59
$ GPC G9 TO G1 TRANSITION $

```

```

026-00 CMD INTG GPC DUMP COMP ACKNOWLEDGE N03IS018E OFF PL
VFY INTG OPERATIONS CONSOLE #12 GO MODE SC12GO ON GIO ST060
COM INTG START OPS TRANSITION N022INTGR DPS PL
VFY INTG INTEGRATION CONSOLE GO MODE SINTGGO ON GIO ST070
COM INTG START OPS TRANSITION N022INTGR INTG PL
VFY INTG MASTER CONSOLE GO MODE SMSTRGO ON GIO ST080
COM INTG START OPS TRANSITION N022INTGR SW PL
VFY INTG BACKUP TYPE II CONSOLE GO MODE SBKUPGO ON GIO ST090
COM INTG START OPS TRANSITION N022INTGR BKUP PL

```

```

027-00 LABL INTG
MSG INTG OPS 101 TRANSITION STARTEDATA XFER STARTED
MSG INTG GO FOR GPC DUMP AND COMPARE

```





SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	CD	T	CLOCK	E	OR	LO	HIGH	UNIT	PSIA	MENG	PSIA	MENG
032-03		CVFY	BHYD	RH N2H4 BIL GN2 PRESS SYS B	846P2306C1	350	415	PSIA	INHB	MENG	2.1-4										
033-00		ACL	BHYD	LH TEMP GAS GENERATOR BED SYS A	B46T1503C1	200	220	DEGF			2.1-7										
033-01		ACL	BHYD	LH TEMP GAS GENERATOR BED SYS B	B46T1504C1	200	220	DEGF			2.1-7										
033-02		ACL	BHYD	RH TEMP GAS GENERATOR BED SYS A	B46T2503C1	200	220	DEGF			2.1-7										
033-03		ACL	BHYD	RH TEMP GAS GENERATOR BED SYS B	B46T2504C1	200	220	DEGF			2.1-7										

\$ PURGE SEQ 3 AND LEAK CHECK MONITOR \$

034-00		CVFY	SSME	ME-1 OPERATING MODE	E41J1513B1	B011			INHB	MPS4											
034-01		CVFY	SSME	ME-2 OPERATING MODE	E41J2513B1	B011			INHB	MPS4											
034-02		CVFY	SSME	ME-3 OPERATING MODE	E41J3513B1	B011			INHB	MPS4											
034-03		CVFY	SSME	ME-1 HPFT DISCH TEMP (CHA)	E41T1010B1	360	NOHI	DEGR	1 OF 2		6.2-2-19										
034-04		CVFY	SSME	ME-1 HPFT DISCH TEMP (CHB)	E41T1011B1	360	NOHI	DEGR	1 OF 2		6.2-2-19										
034-05		CVFY	SSME	ME-2 HPFT DISCH TEMP (CHA)	E41T2010B1	360	NOHI	DEGR	1 OF 2		6.2-2-19										
034-06		CVFY	SSME	ME-2 HPFT DISCH TEMP (CHB)	E41T2011B1	360	NOHI	DEGR	1 OF 2		6.2-2-19										
034-07		CVFY	SSME	ME-3 HPFT DISCH TEMP (CHA)	E41T3010B1	360	NOHI	DEGR	1 OF 2		6.2-2-19										
034-08		CVFY	SSME	ME-3 HPFT DISCH TEMP (CHB)	E41T3011B1	360	NOHI	DEGR	1 OF 2		6.2-2-19										

\$ DPS STATUS MONITOR \$

035-00		CVFY	DPS	PASS FSM OR BFS GPC ERR	N039INTGR	OFF			CPER	G012	TIL	MENG	6.9.3-2								
035-01		CVFY	DPS	BFS TRKG F/C 1	V98X2752X1	ON			INHB	MENG			6.9.24-9								
035-02		CVFY	DPS	BFS TRKG F/C 2	V98X2753X1	ON			INHB	MENG			6.9.24-9								
035-03		CVFY	DPS	BFS TRKG F/C 3	V98X2754X1	ON			INHB	MENG			6.9.24-9								
035-04		CVFY	DPS	BFS TRKG F/C 4	V98X2755X1	ON			INHB	MENG			6.9.24-9								
035-05		CVFY	DPS	BFS TERM B	V98X0594X1	ON			INHB	MENG			6.9.24-2								
035-06		CVFY	DPS	BFS ENGAGE 1	V98X0604X1	OFF			INHB	MENG			6.9.24-3								
035-07		CVFY	DPS	BFS ENGAGE 2	V98X0605X1	OFF			INHB	MENG			6.9.24-3								
035-08		CVFY	DPS	BFS ENGAGE 3	V98X0606X1	OFF			INHB	MENG			6.9.24-3								
035-09		CVFY	DPS	LH DDU PWR SUPPLY A GOOD	V73X3001X1	ON			INHB	M009			6.9.10-35								
035-10		CVFY	DPS	LH DDU PWR SUPPLY B GOOD	V73X3002X1	ON			INHB	M009			6.9.10-35								
035-11		CVFY	DPS	LH DDU PWR SUPPLY C GOOD	V73X3003X1	ON			INHB	M009			6.9.10-35								
035-12		CVFY	DPS	RH DDU PWR SUPPLY A GOOD	V73X3011X1	ON			INHB	M009			6.9.10-35								
035-13		CVFY	DPS	RH DDU PWR SUPPLY B GOOD	V73X3012X1	ON			INHB	M009			6.9.10-35								
035-14		CVFY	DPS	RH DDU PWR SUPPLY C GOOD	V73X3013X1	ON			INHB	M009			6.9.10-35								
035-15		CVFY	DPS	FF1 IMU BYPASS	V91X2273XX	OFF			INHB	MSEQ			6.9.3-5								
035-16		CVFY	DPS	FF2 IMU BYPASS	V91X2274XX	OFF			INHB	MSEQ			6.9.3-5								
035-17		CVFY	DPS	FF3 IMU BYPASS	V91X2275XX	OFF			INHB	MSEQ			6.9.3-5								
035-18		CVFY	DPS	EIU1/P4 DATA BYP (HFE INPUT)	V91X2813XX	OFF			INHB	MSEQ			6.9.3-5								
035-19		CVFY	DPS	EIU2/P4 DATA BYP (HFE INPUT)	V91X2817XX	OFF			INHB	MSEQ			6.9.3-5								
035-20		CVFY	DPS	EIU3/P4 DATA BYP (HFE INPUT)	V91X2821XX	OFF			INHB	MSEQ			6.9.3-5								
035-21		CVFY	DPS	EIU1/P1 DATA BYPASS (HFE INPUT)	V91X2927XX	OFF			INHB	MSEQ			6.9.3-6								

SEQ : TIME : I : FUNC : DISC : NOMENCLATURE : FUNCTION : VALUE : ELSE : DURATION : LCC : S : S :  
 CD : T : : : : : : : : : : : : : : : : S : S :  
 CLOCK : E : : : : : : : : : : : : : : : : F : F :  
 : : : : : : : : : : : : : : : : D : D :

035-22	CVFY GNS		EIU2/P1 DATA BYPASS (HFE INPUT)		V91X2930XX OFF			INHB	MSEQ			6.9.3-6
035-23	CVFY DPS		EIU3/P1 DATA BYPASS (HFE INPUT)		V91X2933XX OFF			INHB	MSEQ			6.9.3-6
035-24	CVFY DPS		MTU ACCUMULATOR SOURCE		V98J0615C1 B001	B010		CPER	G005	TIL	MSEQ	6.9.24-4
035-25	CVFY DPS		PAYLOAD 1B PF1		V98X0961X1 OFF			INHB	MSEQ			6.9.24-13
035-26	CVFY DPS		PAYLOAD 1B PF2		V98X0965X1 OFF			INHB	MSEQ			6.9.24-13
\$ IMU RGA AA FAILURE MONITOR \$												
036-00	CVFY GNS		IMU 1 FAIL		V90X2601X1 OFF			INHB	MSEQ			6.9.10-31
036-01	CVFY GNS		IMU 2 FAIL		V9CX2701X1 OFF			INHB	MSEQ			6.9.10-31
036-02	CVFY GNS		IMU 3 FAIL		V9CX2801X1 OFF			INHB	MSEQ			6.9.10-31
036-03	CVFY GNS		RG 1 FAIL		V90X5401X1 OFF			INHB	MSEQ			6.9.10-43
036-04	CVFY GNS		RG 2 FAIL		V90X5501X1 OFF			INHB	MSEQ			6.9.10-43
036-05	CVFY GNS		RG 3 FAIL		V90X5601X1 OFF			INHB	MSEQ			6.9.10-43
036-06	CVFY GNS		AA 1 FAIL		V90X5701X1 OFF			INHB	MSEQ			6.9.10-44
036-07	CVFY GNS		AA 2 FAIL		V90X5801X1 OFF			INHB	MSEQ			6.9.10-44
036-08	CVFY GNS		AA 3 FAIL		V90X5901X1 OFF			INHB	MSEQ			6.9.10-44
036-09	CVFY GNS		LH SRB COMP PITCH RATE 1		V95R4181C1 -0.45	+0.45	DEG/S	INHB	MSEQ			6.9.10-45
036-10	CVFY GNS		LH SRB COMP PITCH RATE 2		V95R4182C1 -0.45	+0.45	DEG/S	INHB	MSEQ			6.9.10-45
036-11	CVFY GNS		LH SRB COMP PITCH RATE 3		V95R4183C1 -0.45	+0.45	DEG/S	INHB	MSEQ			6.9.10-45
036-12	CVFY GNS		LH SRB COMP YAW RATE 1		V95R4191C1 -0.45	+0.45	DEG/S	INHB	MSEQ			6.9.10-45
036-13	CVFY GNS		LH SRB COMP YAW RATE 2		V95R4192C1 -0.45	+0.45	DEG/S	INHB	MSEQ			6.9.10-45
036-14	CVFY GNS		LH SRB COMP YAW RATE 3		V95R4193C1 -0.45	+0.45	DEG/S	INHB	MSEQ			6.9.10-45
036-15	CVFY GNS		RH SRB COMP PITCH RATE 1		V95R4211C1 -0.45	+0.45	DEG/S	INHB	MSEQ			6.9.10-45
036-16	CVFY GNS		RH SRB COMP PITCH RATE 2		V95R4212C1 -0.45	+0.45	DEG/S	INHB	MSEQ			6.9.10-45
036-17	CVFY GNS		RH SRB COMP PITCH RATE 3		V95R4213C1 -0.45	+0.45	DEG/S	INHB	MSEQ			6.9.10-45
036-18	CVFY GNS		RH SRB COMP YAW RATE 1		V95R4221C1 -0.45	+0.45	DEG/S	INHB	MSEQ			6.9.10-45
036-19	CVFY GNS		RH SRB COMP YAW RATE 2		V95R4222C1 -0.45	+0.45	DEG/S	INHB	MSEQ			6.9.10-45
036-20	CVFY GNS		RH SRB COMP YAW RATE 3		V95R4223C1 -0.45	+0.45	DEG/S	INHB	MSEQ			6.9.10-45
036-21	CVFY GNS		\$ DELETED \$									
036-22	CVFY GNS		\$ DELETED \$									
036-23	CVFY GNS		\$ DELETED \$									
036-24	CVFY GNS		\$ DELETED \$									
036-25	CVFY GNS		\$ DELETED \$									
036-26	CVFY GNS		AA4 FAIL		V90X5951X1 OFF			INHB	MSEQ			6.9.10-44

```

: DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S90C5 - L :
: S : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
: SEQ : TIME : I : FUNC : DISC : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
: : CD : T : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
: : CLOCK : E : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
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036-27 : CVFY GNS : RGA4 FAIL : V90X5651X1 OFF : INHB MSEQ : 6.9.10-43

```

```

$ CONTROLLERS STATUS CHECK $
$ IN THE FOLLOWING 18 SEQUENCES THE ELSE ACTION HAS SPECIAL SIGNIFICANCE. 3 OF 2 $
$ LOGIC INDICATES THAT IF ALL 3 MSMTS ARE OUT OF TOLERANCE A FAILURE DOES NOT $
$ EXIST AND MONITORING IS RESUMED. ONE OR TWO MSMTS OUT OF TOLERANCE IS A $
$ FAILURE AND IS SO ANNUNCIATED $

```

SEQ	TIME	CD	CLOCK	E	S	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
037-00					CVFY	FCL			LEFT RHC ROLL CMD A		6.8	DEG	3 OF 2		6.9.10-2
037-01					CVFY	FCL			LEFT RHC ROLL CMD B		6.8	DEG	3 OF 2		6.9.10-2
037-02					CVFY	FCL			LEFT RHC ROLL CMD C		6.8	DEG	INHB M009		6.9.10-2
037-03					CVFY	FCL			LEFT RHC PITCH CMD A		5.1	DEG	3 OF 2		6.9.10-2
037-04					CVFY	FCL			LEFT RHC PITCH CMD B		5.1	DEG	3 OF 2		6.9.10-2
037-05					CVFY	FCL			LEFT RHC PITCH CMD C		5.1	DEG	INHB M009		6.9.10-2
037-06					CVFY	FCL			LEFT RHC YAW CMD A		2.8	DEG	3 OF 2		6.9.10-2
037-07					CVFY	FCL			LEFT RHC YAW CMD B		2.8	DEG	3 OF 2		6.9.10-2
037-08					CVFY	FCL			LEFT RHC YAW CMD C		2.8	DEG	INHB M009		6.9.10-2
037-09					CVFY	FCL			RIGHT RHC ROLL CMD A		6.8	DEG	3 OF 2		6.9.10-2
037-10					CVFY	FCL			RIGHT RHC ROLL CMD B		6.8	DEG	3 OF 2		6.9.10-2
037-11					CVFY	FCL			RIGHT RHC ROLL CMD C		6.8	DEG	INHB M009		6.9.10-2
037-12					CVFY	FCL			RIGHT RHC PITCH CMD A		5.1	DEG	3 OF 2		6.9.10-2
037-13					CVFY	FCL			RIGHT RHC PITCH CMD B		5.1	DEG	3 OF 2		6.9.10-2
037-14					CVFY	FCL			RIGHT RHC PITCH CMD C		5.1	DEG	INHB M009		6.9.10-2
037-15					CVFY	FCL			RIGHT RHC YAW CMD A		2.8	DEG	3 OF 2		6.9.10-2
037-16					CVFY	FCL			RIGHT RHC YAW CMD B		2.8	DEG	3 OF 2		6.9.10-2
037-17					CVFY	FCL			RIGHT RHC YAW CMD C		2.8	DEG	INHB M009		6.9.10-2
038-00					CVFY	FCL			FWD THC POS X OUTPUT A				2 OF 3		6.9.10-4
038-01					CVFY	FCL			FWD THC POS X OUTPUT B				2 OF 3		6.9.10-4
038-02					CVFY	FCL			FWD THC POS X OUTPUT C				INHB MSEQ		6.9.10-4
038-03					CVFY	FCL			FWD THC NEG X OUTPUT A				2 OF 3		6.9.10-4
038-04					CVFY	FCL			FWD THC NEG X OUTPUT B				2 OF 3		6.9.10-4
038-05					CVFY	FCL			FWD THC NEG X OUTPUT C				INHB MSEQ		6.9.10-4
038-06					CVFY	FCL			FWD THC POS Y OUTPUT A				2 OF 3		6.9.10-4
038-07					CVFY	FCL			FWD THC POS Y OUTPUT B				2 OF 3		6.9.10-4
038-08					CVFY	FCL			FWD THC POS Y OUTPUT C				INHB MSEQ		6.9.10-4
038-09					CVFY	FCL			FWD THC NEG Y OUTPUT A				2 OF 3		6.9.10-4
038-10					CVFY	FCL			FWD THC NEG Y OUTPUT B				2 OF 3		6.9.10-4
038-11					CVFY	FCL			FWD THC NEG Y OUTPUT C				INHB MSEQ		6.9.10-4
038-12					CVFY	FCL			FWD THC POS Z OUTPUT A				2 OF 3		6.9.10-4
038-13					CVFY	FCL			FWD THC POS Z OUTPUT B				2 OF 3		6.9.10-4

SEQ : TIME : I : FUNC:DISC : NOMENCLATURE : FUNCTION : VALUE : ELSE : DURATION : LCC : S :
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: D :

Table with columns for sequence number, time, function, nomenclature, value, and duration. Rows include 038-14, 038-15, 038-16, 038-17, and 039-00.

Table with columns for sequence number, time, function, nomenclature, value, and duration. Rows include 040-00 through 040-11, covering PYRO SYS STATUS MONITOR and CENTAUR RBUS PIC CAP VOLTS.

Table with columns for sequence number, time, function, nomenclature, value, and duration. Rows include 041-00 through 041-07, covering SRB CHAMBER PRESS TRANSDUCER MONITOR.

Table with columns for sequence number, time, function, nomenclature, value, and duration. Rows include 042-00 through 042-03, covering SRB CHAMBER PRESS SRM CHAMBER.

DATE	TIME	CD	CLOCK	SEQ	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE	OMI						
12-10-85															9005 - L						
GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33																					
042-04	CVFY	BINS	RH	PRESS	SRM	CHAMBER	B	B47P2301C1	3-8	45-5	PSIA	INHB	MSEQ	2-4-11							
042-05	CVFY	BINS	RH	PRESS	SRM	CHAMBER	C	B47P2302C1	3-8	45-5	PSIA	INHB	MSEQ	2-4-11							
\$ APU START CONSTRAINTS \$																					
043-00	HYD	SYS	1	RVSR	FLUID	PRESS		V58P0131A1	43	120	PSIA	1	OF	2	6-7-2-10						
043-01	CVFY	HYD	SYS	1	GN2	ACCUM	PRESS	V58P0167A1	1906	3233	PSIA	INHB	MAPU	6-7-2-10							
043-02	CVFY	HYD	SYS	2	RVSR	FLUID	PRESS	V58P0231A1	43	120	PSIA	1	OF	2	6-7-2-10						
043-03	CVFY	HYD	SYS	2	GN2	ACCUM	PRESS	V58P0267A1	1906	3233	PSIA	INHB	MAPU	6-7-2-10							
043-04	CVFY	HYD	SYS	3	RVSR	FLUID	PRESS	V58P0331A1	43	120	PSIA	1	OF	2	6-7-2-10						
043-05	CVFY	HYD	SYS	3	GN2	ACCUM	PRESS	V58P0367A1	1906	3233	PSIA	INHB	MAPU	6-7-2-10							
043-06	CVFY	HYD	SYS	1	CIRC	PUMP	PRESS	V58P0137A1	330	NOHI	PSIA	INHB	MAPU	6-7-2-5							
043-07	CVFY	HYD	SYS	2	CIRC	PUMP	PRESS	V58P0237A1	330	NOHI	PSIA	INHB	MAPU	6-7-2-5							
043-08	CVFY	HYD	SYS	3	CIRC	PUMP	PRESS	V58P0437A1	330	NOHI	PSIA	INHB	MAPU	6-7-2-5							
\$ DELETED \$																					
044-01	CVFY	APU	APU	1	GRBX	LUBE	OIL	OUTPRESS	V46P0153A1	NOLO	35	PSIA	INHB	MAPU	6-6-22						
044-02	\$ DELETED \$																				
044-03	CVFY	APU	APU	2	GRBX	LUBE	OIL	OUTPRESS	V46P0253A1	NOLO	35	PSIA	INHB	MAPU	6-6-22						
044-04	\$ DELETED \$																				
044-05	CVFY	APU	APU	3	GRBX	LUBE	OIL	OUTPRESS	V46P0353A1	NOLO	35	PSIA	INHB	MAPU	6-6-22						
\$ VEHICLE HOLD FLAG MONITOR \$																					
045-00	CVFY	INTG	COUNTDOWN	HOLD	FLAG	V90X8667X1	OFF									INHB	MSRB	CPER	G001		
\$ SYSTEM VALIDITY FLAGS \$																					
046-00	CVFY	INTG	OPERATIONS	CONSOLE	#3	GO	MODE	SC3G0	ON							INHB	MSEQ	4-8			
046-01	CVFY	INTG	OPERATIONS	CONSOLE	#4	GO	MODE	SC4G0	ON							INHB	MSEQ	4-9			
046-02	CVFY	INTG	OPERATIONS	CONSOLE	#12	GO	MODE	SC12G0	ON							INHB	MSEQ	4-7			
046-03	CVFY	INTG	MASTER	CONSOLE	GO	MODE	SMSRGO	ON							INHB	MSEQ	4-4				
046-04	CVFY	INTG	BACKUP	TYPE	II	CONSOLE	GO	MODE	SBKUPGO	ON							CPER	G015	TIL	MSRB	4-6
046-05	CVFY	INTG	PROCESSING	DATA	RECORDER	GO	MODE	SPDRGO	ON							INHB	MSEQ	4-17			
046-06	CVFY	INTG	LDB	FEP	ACTIVE	DATA	VALID	SLOBADATAV	ON							INHB	MENG	4-12			
046-07	CVFY	INTG	GSE	FEP	#1	ACTIVE	DATA	VALID	SGSTADATAV	ON							INHB	MSRB	4-15		
046-08	CVFY	INTG	GSE	FEP	#2	ACTIVE	DATA	VALID	SGSZADATAV	ON							INHB	MSRB	4-16		
046-09	CVFY	INTG	GSE	FEP	#3	ACTIVE	DATA	VALID	S6S3DATAV	ON							INHB	MSEQ	4-18		
046-10	CVFY	INTG	TIME	CODE	GEN	PBIC=1	DATA	VALID	STCG1DATAV	ON							1	OF	2		
046-11	CVFY	INTG	TIME	CODE	GEN	PBIC=2	DATA	VALID	SICG2DATAV	ON							INHB	MSEQ	4-18		
046-12	CVFY	INTG	128	OI	FEP	ACTIVE	DATA	VALID	SOIADATAV	ON							INHB	MSRB	4-14		
046-13	CVFY	INTG	GPC	FEP	AREA	1	STATUS	SGPCAREA1	ON							INHB	MSRB	4-13			



DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S90C5 - L :

SEQ : TIME : FUNC : DISC : NOMENCLATURE : FUNCTION : VALUE : ELSE : DURATION : LCC : S :

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CLOCK : E : : : : : : : : : : : : F :

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049-00 -09:30

\$ SRB HPU STATUS CHECK \$

050-00	VFY	BHYD	LH N2H4 BTL TEMP SYS A	B46T1501C1 45.0	139.5	DEGF	1 OF 2		2.1-6
050-01	VFY	BHYD	LH N2H4 BTL TEMP SYS B	B46T1502C1 45.0	139.5	DEGF	INHB M009		2.1-6
050-02	VFY	BHYD	LH HYD FLUID RSVR LEVEL SYS A	B58Q1350C1 60	80	PCT	INHB M009		2.1-8
050-03	VFY	BHYD	LH HYD FLUID RSVR LEVEL SYS B	B58Q1351C1 60	80	PCT	INHB M009		2.1-8
050-04	VFY	BHYD	RH N2H4 BTL TEMP SYS A	B46T2501C1 45.0	139.5	DEGF	1 OF 2		2.1-6
050-05	VFY	BHYD	RH N2H4 BTL TEMP SYS B	B46T2502C1 45.0	139.5	DEGF	INHB M009		2.1-6
050-06	VFY	BHYD	RH HYD FLUID RSVR LEVEL SYS A	B58Q2350C1 60	80	PCT	INHB M009		2.1-8
050-07	VFY	BHYD	RH HYD FLUID RSVR LEVEL SYS B	B58Q2351C1 60	80	PCT	INHB M009		2.1-8

\$ KSC SS WATER SYSTEM STATUS CHECK \$

051-00	K	VFY	WATR	TS/CCS OP CMD LOCKOUT IND	GWDXPT47E	ON	INHB M009		
051-01	K	VFY	WATR	VO/LPS ENABLED IND	GWDXPT13E	ON	INHB M009		

\$ RANGE SAFETY STATUS CHECK \$

052-00	VFY	BRS	LH CURRENT RSS BATTERY NO 1	B55C1051C1 .02	.75	AMP	INHB M009		2.2-19
052-01	VFY	BRS	LH CURRENT RECOV BATT	B76C1050C1 .02	.75	AMP	INHB M009		2.2-20
052-02	VFY	BRS	RH CURRENT RSS BATTERY NO 1	B55C2051C1 .02	.75	AMP	INHB M009		2.2-19
052-03	VFY	BRS	RH CURRENT RECOV BATT	B76C2050C1 .02	.75	AMP	INHB M009		2.2-20
052-04	VFY	BPYR	LH VOLTAGE RSS BATTNO 1	B55V1625C1 26.7	32.3	V	INHB M009		2.2-14
052-05	VFY	BELE	LH VOLTAGE RECOV BATT	B76V1602C1 26.7	39.8	V	INHB M009		2.2-15
052-06	VFY	BPYR	RH VOLTAGE RSS BATT NO 1	B55V2625C1 26.7	32.3	V	INHB M009		2.2-14
052-07	VFY	BELE	RH VOLTAGE RECOV BATT	B76V2602C1 26.7	39.8	V	INHB M009		2.2-15

\$ DELETED \$

\$ DELETED \$

052-08									
052-09									
052-10	VFY	TRS	ET RSS BAT A V	T55V1735A1 26.7	32.3	V	INHB M009		5.2-12
052-11	VFY	TRS	ET RSS BAT B V	T55V1736A1 26.7	32.3	V	INHB M009		5.2-13
052-12	VFY	TRS	ET RSS DCDR PWR ON CHK TONE OFF	T55X1925E1 ON			INHB M009		5.2-15
052-13	VFY	BRS	LH EV RSS DCDR A ON CHK TONE OFF	B55X1871X1 ON			INHB M009		2.2-17
052-14	VFY	BRS	LH EV RSS DCDR B ON CHK TONE OFF	B55X1872X1 ON			INHB M009		2.2-17
052-15	VFY	BRS	RH EV RSS DCDR A ON CHK TONE OFF	B55X2871X1 ON			INHB M009		2.2-17
052-16	VFY	BRS	RH EV RSS DCDR B ON CHK TONE OFF	B55X2872X1 ON			INHB M009		2.2-17
052-17	VFY	TRS	ET RSS ARM CMD FROM DCDR IND	T55X1931E1 OFF			INHB M009		5.2-22
052-18	VFY	BRS	LH EV RSS ARM CMD FROM DCDR A	B55X1877X1 OFF			INHB M009		2.2-23
052-19	VFY	BRS	LH EV RSS ARM CMD FROM DCDR B	B55X1878X1 OFF			INHB M009		2.2-23
052-20	VFY	BRS	RH EV RSS ARM CMD FROM DCDR A	B55X2877X1 OFF			INHB M009		2.2-23
052-21	VFY	BRS	RH EV RSS ARM CMD FROM DCDR B	B55X2878X1 OFF			INHB M009		2.2-23
052-22	VFY	TRS	ET RSS FIRE CMD FROM DCDR IND	T55X1933E1 OFF			INHB M009		5.2-24
052-23	VFY	BRS	LH EV RSS FIRE CMD FROM DCDR A	B55X1879X1 OFF			INHB M009		2.2-25

DATE 1 35 : GROUND LAUNCH SEQUENCE DESCRIP : DOCUMENT - LCD STS 33 : OMI S90C5 :  
 : SEQ : TIME : I : FUNC:DISC : NOMENCLATURE : FUNCTION : VALUE : ELSE : DURATION : LCC : : S :  
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SEQ	TIME	I	FUNC:DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	:S
052-24		VFY	BRS	LH EV RSS FIRE CMD FROM DCDR B	B55X1880X1 OFF		INHB	M009	2.2-25	
052-25		VFY	BRS	RH EV RSS FIRE CMD FROM DCDR A	B55X2879X1 OFF		INHB	M009	2.2-25	
052-26		VFY	BRS	RH EV RSS FIRE CMD FROM DCDR B	B55X2880X1 OFF		INHB	M009	2.2-25	
052-27		VFY	BRS	LH EVENT RSS S/A DEVICE ARMED	B55X1870X1 OFF		INHB	M009	2.2-4	
052-28		VFY	BRS	RH EVENT RSS S/A DEVICE ARMED	B55X2870X1 OFF		INHB	M009	2.2-4	
052-29		VFY	TRS	ET RSS S/A DVC ARMED	T55X1870X1 OFF		INHB	M009	5.2-4	
052-30		VFY	BRS	LH EVENT RSS S/A DEVICE SAFED	B55X1869X1 ON		INHB	M009	2.2-4	
052-31		VFY	BRS	RH EVENT RSS S/A DEVICE SAFED	B55X2869X1 ON		INHB	M009	2.2-4	
052-32		VFY	TRS	ET RSS S/A DVC SAFED	T55X1869X1 ON		INHB	M009	5.2-5	
\$ SRB FLIGHT CONTROL STATUS CHECK \$										
053-00		VFY	BHYD	LH DELTA PRESS SECONDARY A ROCK	B58P1311A1 -237	+237	PSID	INHB	M009	2.1-17
053-01		VFY	BHYD	LH DELTA PRESS SECONDARY B ROCK	B58P1312A1 -237	+237	PSID	INHB	M009	2.1-17
053-02		VFY	BHYD	LH DELTA PRESS SECONDARY C ROCK	B58P1313A1 -237	+237	PSID	INHB	M009	2.1-17
053-03		VFY	BHYD	LH DELTA PRESS SECONDARY D ROCK	B58P1314A1 -237	+237	PSID	INHB	M009	2.1-17
053-04		VFY	BHYD	LH DELTA PRESS SECONDARY A TILT	B58P1315A1 -237	+237	PSID	INHB	M009	2.1-17
053-05		VFY	BHYD	LH DELTA PRESS SECONDARY B TILT	B58P1316A1 -237	+237	PSID	INHB	M009	2.1-17
053-06		VFY	BHYD	LH DELTA PRESS SECONDARY C TILT	B58P1317A1 -237	+237	PSID	INHB	M009	2.1-17
053-07		VFY	BHYD	LH DELTA PRESS SECONDARY D TILT	B58P1318A1 -237	+237	PSID	INHB	M009	2.1-17
053-08		VFY	BHYD	RH DELTA PRESS SECONDARY A ROCK	B58P2311A1 -237	+237	PSID	INHB	M009	2.1-17
053-09		VFY	BHYD	RH DELTA PRESS SECONDARY B ROCK	B58P2312A1 -237	+237	PSID	INHB	M009	2.1-17
053-10		VFY	BHYD	RH DELTA PRESS SECONDARY C ROCK	B58P2313A1 -237	+237	PSID	INHB	M009	2.1-17
053-11		VFY	BHYD	RH DELTA PRESS SECONDARY D ROCK	B58P2314A1 -237	+237	PSID	INHB	M009	2.1-17
053-12		VFY	BHYD	RH DELTA PRESS SECONDARY A TILT	B58P2315A1 -237	+237	PSID	INHB	M009	2.1-17
053-13		VFY	BHYD	RH DELTA PRESS SECONDARY B TILT	B58P2316A1 -237	+237	PSID	INHB	M009	2.1-17
053-14		VFY	BHYD	RH DELTA PRESS SECONDARY C TILT	B58P2317A1 -237	+237	PSID	INHB	M009	2.1-17
053-15		VFY	BHYD	RH DELTA PRESS SECONDARY D TILT	B58P2318A1 -237	+237	PSID	INHB	M009	2.1-17
\$ RUDDER PEDAL OUTPUT TRACKING CHECKS \$										
\$ IN THE FOLLOWING 6 SEQUENCES THE VALUE OF THE FIRST MEASUREMENT \$										
\$ IS VERIFIED TO BE WITHIN THE SPECIFIED BAND OF THE SECOND MEASUREMENT \$										
054-00		VFY	FCL	LEFT RUDDER PEDAL CMD A	V72K1530C1 3.6FD	3.6FD	DEG	INHB	M009	6.9.10-6
054-01		VFY	FCL	LEFT RUDDER PEDAL CMD B	V72K1531C1			INHB	M009	6.9.10-6
054-02		VFY	FCL	LEFT RUDDER PEDAL CMD C	V72K1532C1			INHB	M009	6.9.10-6
054-03		VFY	FCL	RIGHT RUDDER PEDAL CMD A	V72K1530C1			INHB	M009	6.9.10-6
					V72K1540C1 3.6FD	3.6FD	DEG	INHB	M009	6.9.10-6
					V72K1541C1					



DATE	TIME	CD	CLOCK	SEQ	S	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE	OMI	S9005	L
GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33																		
054-04	VFY	FCL							RIGHT RUDDER PEDAL CMD B	V72K1541C1	3.6FD	DEG	INHB	M009			6.9.10-6	
										V72K1542C1								
054-05	VFY	FCL							RIGHT RUDDER PEDAL CMD C	V72K1542C1	3.6FD	DEG	INHB	M009			6.9.10-6	
										V72K1540C1								
054-06									\$ DELETED \$									
054-07									\$ DELETED \$									
054-08									\$ DELETED \$									
054-09									\$ DELETED \$									
054-10									\$ DELETED \$									
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054-15									\$ DELETED \$									
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054-19									\$ DELETED \$									
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054-21									\$ DELETED \$									
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054-23									\$ DELETED \$									
054-24									\$ DELETED \$									
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054-26									\$ DELETED \$									
054-27									\$ DELETED \$									
054-28									\$ DELETED \$									
054-29									\$ DELETED \$									
\$ ORDNANCE SYSTEMS STATUS CHECK \$																		
055-00	VFY	BELE							LH TEMPERATURE RECOVERY BATTERY	B76T1500C1	34.2	102.8	DEGF	INHB	M009			2.2-6
055-01	VFY	BELE							RH TEMPERATURE RECOVERY BATTERY	B76T2500C1	34.2	102.8	DEGF	INHB	M009			2.2-6
055-02	VFY	EPDC							SYS A ETVAS PIC CAP VOLTS	GMSV1311A	N0L0	1.5	V	1 OF 2				
055-03	VFY	EPDC							SYS A ETVAS PIC CAP RED VOLTS	GMSV3311A	N0L0	1.5	V	1 OF 2				
055-04	VFY	EPDC							SYS B ETVAS PIC CAP VOLTS	GMSV2311A	N0L0	1.5	V	1 OF 2				
055-05	VFY	EPDC							SYS B ETVAS PIC CAP RED VOLTS	GMSV4311A	N0L0	1.5	V	1 OF 2				
056-00	VFY	TINS							TUMBLE SYSTEM ARMED	T56X0002E1	OFF			INHB	M009			
056-01									\$ DELETED \$									
056-02									\$ DELETED \$									
056-03									\$ DELETED \$									

DATE 12 5 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 OMI S9005

: SEQ : TIME : I : FUNC : DISC : Nomenclature : Function : Value : Else : Duration : LCC : PAGE  
: CD : T : : : : : : : : : : : :  
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: D :

056-04 \$ DELETED \$  
056-05 \$ DELETED \$  
056-06 \$ DELETED \$  
056-07 \$ DELETED \$

\$ ENVIRONMENTAL CONTROL STATUS CHECK \$

057-00 \$ DELETED \$  
057-01 VFY ECLS POT TK D OR WASTE TK 2 QTY V6280544A1 2 105 PCT 1 OF 3  
057-02 VFY ECLS POTABLE H2O TANK C QUANTITY V6280548A1 2 105 PCT 1 OF 3  
057-03 VFY ECLS POTABLE H2O TANK B QUANTITY V6280420A1 2 105 PCT LCC-1  
057-04 VFY ECLS POTABLE H2O TANK A QUANTITY V6280410A1 2 83.3 PCT LCC-1

\$ PURGE VENT AND DRAIN STATUS CHECKS \$

058-00 VFY PVD L FWD VENTS 1/2 PURGE IND 1 V59X3105X1 ON INHB M009  
058-01 VFY PVD L FWD VENTS 1/2 PURGE IND 2 V59X3115X1 ON INHB M009  
058-02 VFY PVD R FWD VENTS 1/2 PURGE IND 1 V59X4105X1 ON INHB M009  
058-03 VFY PVD R FWD VENTS 1/2 PURGE IND 2 V59X4115X1 ON INHB M009  
058-04 VFY PVD L PB VENT 3 CLOSED 1 V59X3205X1 ON INHB M009  
058-05 VFY PVD L PB VENT 3 CLOSED 2 V59X3215X1 ON INHB M009  
058-06 VFY PVD R PB VENT 3 CLOSED 1 V59X4205X1 ON INHB M009  
058-07 VFY PVD R PB VENT 3 CLOSED 2 V59X4215X1 ON INHB M009  
058-08 VFY PVD L PB VENT 5 CLOSED 1 V59X3405X1 ON INHB M009  
058-09 VFY PVD L PB VENT 5 CLOSED 2 V59X3415X1 ON INHB M009  
058-10 VFY PVD R PB VENT 5 CLOSED 1 V59X4405X1 ON INHB M009  
058-11 VFY PVD R PB VENT 5 CLOSED 2 V59X4415X1 ON INHB M009  
058-12 VFY PVD L PB/W VENT 4/7 CLOSED 1 V59X3305X1 ON INHB M009  
058-13 VFY PVD L PB/W VENT 4/7 CLOSED 2 V59X3315X1 ON INHB M009  
058-14 VFY PVD R PB/W VENT 4/7 CLOSED 1 V59X4305X1 ON INHB M009  
058-15 VFY PVD R PB/W VENT 4/7 CLOSED 2 V59X4315X1 ON INHB M009  
058-16 VFY PVD L PB VENT 6 CLOSED IND 1 V59X3505X1 ON INHB M009  
058-17 VFY PVD L PB VENT 6 CLOSED IND 2 V59X3515X1 ON INHB M009  
058-18 VFY PVD R PB VENT 6 CLOSED IND 1 V59X4505X1 ON INHB M009  
058-19 VFY PVD R PB VENT 6 CLOSED IND 2 V59X4515X1 ON INHB M009  
058-20 VFY PVD L AFT VENTS 8/9 PURGE IND 1 V59X3905X1 ON INHB M009  
058-21 VFY PVD L AFT VENTS 8/9 PURGE IND 2 V59X3915X1 ON INHB M009  
058-22 VFY PVD R AFT VENTS 8/9 PURGE IND 1 V59X4905X1 ON INHB M009  
058-23 VFY PVD R AFT VENTS 8/9 PURGE IND 2 V59X4915X1 ON INHB M009

\$ VLS SSW REMOTE CONTROL CHECKS \$

059-00 V VFY WATR SSW PRI DC POWER ON IND XWDXVB73E ON 1 OF 2

DATE	TIME	CD	CLOCK	SEQ	TIME	CD	CLOCK	FUNCTION	DESIGNATOR	SINGL	OR	LO	HIGH	UNIT	VALUE	ELSE	DURATION	LCC	PAGE
12-10-85																			
GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33																			
OMI S9005 - L																			
059-01	V	VFY	WATR	SSW	SEC	DC	POWER	ON	IND	XWDVB83E	ON								
059-02	V	VFY	WATR	SSW	PRI	DC	POWER	BUS	ON	XWDVB03E	ON								
059-03	V	VFY	WATR	SSW	SEC	DC	POWER	BUS	ON	XWDVB13E	ON								
\$ KSC OOA ACCUM LEVEL CHECK \$																			
060-00	K	VFY	ARMS	ACCUM	LEVEL	SW	NO.	1	LOW	GSAX7641E	OFF								
060-01	K	VFY	ARMS	ACCUM	LEVEL	SW	NO.	2	LOW	GSAX7661E	OFF								
060-02	K	VFY	ARMS	ACCUM	LEVEL	SW	NO.	3	LOW	GSAX7681E	OFF								
060-03	K	VFY	ARMS	ACCUM	LEVEL	SW	NO.	4	LOW	GSAX7701E	OFF								
060-04	K	VFY	ARMS	ACCUM	LEVEL	SW	NO.	1	LOW	GSAX7646E	OFF								
060-05	K	VFY	ARMS	ACCUM	LEVEL	SW	NO.	2	LOW	GSAX7666E	OFF								
060-06	K	VFY	ARMS	ACCUM	LEVEL	SW	NO.	3	LOW	GSAX7686E	OFF								
060-07	K	VFY	ARMS	ACCUM	LEVEL	SW	NO.	4	LOW	GSAX7706E	OFF								
\$ KSC OOA ACCUM PRESSURIZATION CHECK \$																			
060-10	K	VFY	ARMS	2700	PSI	GN2	PRESS	SW	NORM	GSAX7731E	ON								
060-11	K	VFY	ARMS	2700	PSI	GN2	PRESS	SW	NORM	GSAX7736E	ON								
060-12	K	VFY	ARMS	2700	PSI	GN2	PRESS	XDUCER		GSAP7801A	2000								
060-13	K	VFY	ARMS	2700	PSI	GN2	PRESS	XDUCER		GSAP7806A	2000								
060-14	K	VFY	ARMS	750	PSI	GN2	PRESS	XDUCER		GSAP7811A	250								
060-15	K	VFY	ARMS	750	PSI	GN2	PRESS	XDUCER		GSAP7816A	250								
\$ VLS CCAA REMOTE CONTROL CHECKS \$																			
060-50	V	VFY	ARMS	CCAA	PRI	DC	POWER	BUS	ON	IND	XEGVA03E	ON							
060-51	V	VFY	ARMS	CCAA	SEC	DC	POWER	BUS	ON	IND	XEGVA13E	ON							
060-52	V	VFY	ARMS	CCAA	PRI	DC	POWER	ON	IND	XEGVA23E	ON								
060-53	V	VFY	ARMS	CCAA	SEC	DC	POWER	ON	IND	XEGVA33E	ON								
061-00	-9:01																		
062-00																			
\$ DELETED \$																			
MSG INTG GO FOR T-9 GLS SEQUENCE																			
LABL INTG																			







DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S90C5 - L

SEQ : TIME : I : FUNC : DISC : NOMENCLATURE : FUNCTION : VALUE : ELSE : DURATION : LCC : S

CD : T : : : : : : : : : : : : : : : : : S

CLOCK : E : : : : : : : : : : : : : : : : : F

: : : : : : : : : : : : : : : : : D

100-00 -09:00

\*\*\*\*\* I-9 MILESTONE \*\*\*\*\* M009

\*\*\*\*\* LABL\_INTG \*\*\*\*\*

101-01 VFY INTG GLS-GO FOR OAA RETRACT M0AA ON INHB M009

101-02 VFY INTG GLS-GO FOR APU START MAPU ON INHB M009

101-03 VFY INTG GLS-GO FOR PURGE SEQ 4 MPS4 ON INHB M009

101-04 VFY INTG GLS-GO FOR ET L02 PRE-PRESSURIZI MLOX ON INHB M009

101-05 VFY INTG GLS-GO FOR ET LH2 REPLN IERN MLH2 ON INHB M009

101-06 VFY INTG GLS-GO FOR AUTO SEQ START MSEQ ON INHB M009

101-07 VFY INTG GLS-GO FOR SSME IGNITION MENG ON INHB M009

101-08 VFY INTG GLS-GO FOR SRB IGNITION MSRB ON INHB M009

101-09 VFY INTG RSS MANUAL HOLD ON INHB M009

101-10 VFY INTG NTD MANUAL HOLD ON INHB M009

101-11 VFY INTG GLS MANUAL HOLD ON INHB M009

101-12 VFY INTG GO FOR T-9 GLS START MU09 ON HOLD

101-13 CMD INTG COUNTDOWN CLOCK COUNT

101-14 MMSG INTG -07:30 GO FOR OAA RETRACT

101-15 MSG INTG BEGIN TERM COUNT SEQUENCE

102-00 CVFY INTG INTEGRATION CONSOLE GO MODE SINTGGO ON EXIT TIL MSRB

\$ GLS EVENT COMPLETE = 540 \$

\$ BYPASS RSLs OTBD FILL VLV CHECK \$

103-00 CMD INTG LS BYPASS OF L02 OTBD VALVE CLOS CMD-LS ON

103-01 CMD INTG LS BYPASS OF LH2 OTBD VALVE CLOS CMD-LS ON

104-00 -08:50

\$ CONTROL LOGIC MANAGEMENT \$

\$ THE CONTROL LOGIC MANAGEMENT SECTION SETS NO FEP LIMITS,  
 IT HAS BYPASS (SYSTEM AND ELEMENT) CAPABILITY ONLY \$

105-00	ICL	FCL	BODY FLAP POSN FDBK-3	V57H0067C1								
105-01	ICL	FCL	BODY FLAP POSN FDBK-4	V57H0068C1								
105-02	ICL	FCL	L INBD ELEVON ATR CHAN 3 POSN	V58H0804A1								
105-03	ICL	FCL	L INBD ELEVON ATR CHAN 4 POSN	V58H0805A1								
105-04	ICL	FCL	L OUTBD ELEVON ATR CHAN 3 POSN	V58H0854A1								
105-05	ICL	FCL	L OUTBD ELEVON ATR CHAN 4 POSN	V58H0855A1								
105-06	ICL	FCL	R INBD ELEVON ACTR CHAN 3 POSN	V58H0904A1								
105-07	ICL	FCL	R INBD ELEVON ACTR CHAN 4 POSN	V58H0905A1								
105-08	ICL	FCL	R OUTBD ELEVON ACTR CHAN 3 POSN	V58H0954A1								
105-09	ICL	FCL	R OUTBD ELEVON ACTR CHAN 4 POSN	V58H0955A1								
106-00	K	ICL	PVD	L PB VENT 6 CLOSED 1	V59X3505X1							
106-01	K	ICL	PVD	L PB VENT 6 CLOSED 2	V59X3515X1							
106-02	K	ICL	PVD	R PB VENT 6 CLOSED 1	V59X4505X1							
106-03	K	ICL	PVD	R PB VENT 6 CLOSED 2	V59X4515X1							
107-00	ICL	HYD	6416 PUMP NO 1 PRESSURE	GHP1185A								
107-01	ICL	HYD	6416 PUMP NO 2 PRESSURE	GHP1187A								
107-02	ICL	HYD	6421 PUMP NO 1 PRESSURE	GHP1785A								
107-03	ICL	HYD	6421 PUMP NO 2 PRESSURE	GHP1787A								
107-04	ICL	HYD	6417 PUMP NO 1 PRESSURE	GHP1485A								
107-05	ICL	HYD	6417 PUMP NO 2 PRESSURE	GHP1487A								
107-06	ICL	HYD	MAIN BUS A VOLTAGE - MLP	D76V01001								
107-07	ICL	HYD	MAIN BUS B VOLTAGE - MLP	D76V02001								
107-08	ICL	HYD	MAIN BUS C VOLTAGE - MLP	D76V03001								

\$ DELETED \$

108-00	ICL	MPS	MPS-PNEU VLV HE RGLTR OUTLET PRE	V41P1605A1								
108-01	ICL	MPS	MPS E1 HELIUM REG A OUTLET PRESS	V41P1154A1								
108-02	ICL	MPS	MPS E1 HELIUM REG B OUTLET PRESS	V41P1153A1								
108-03	ICL	MPS	MPS E2 HELIUM REG A OUTLET PRESS	V41P1254A1								
108-04	ICL	MPS	MPS E2 HELIUM REG B OUTLET PRESS	V41P1253A1								



DATE	TIME	CD	CLOCK	SEQ	S	TIME	CD	CLOCK	FUNCTION	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE	UNIT	AS	
12-10-85																				
GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33																				
OMI S9005 - L																				
108-06	ICL	MPS	MPS	E3	HELIUM	REG	A	OUTLET	PRESS		V41P1354A1									
108-07	ICL	MPS	MPS	E3	HELIUM	REG	B	OUTLET	PRESS		V41P1353A1									AS
108-08	ICL	MPS	MPS	LH2	ENG	MANIFOLD	PRESSURE				V41P1433C1									AS
108-09	ICL	MPS	MPS	ENG	N0	1	HELIUM	SUPPLY	PRESS		V41P1150C1									AS
108-10	ICL	MPS	MPS	PNEUMATIC	VLV	HE	SUPPLY	PRES			V41P1600A1									AS
108-11	ICL	MPS	MPS	LOX	ENGINE	MANIFOLD	PRESS				V41P1533C1									AS
109-00	ICL	FCP	PRSD	02	TK	1	HTR	A1	-ON		V45X1106E1									AS
109-01	ICL	FCP	PRSD	02	TK	1	HTR	ASSY	1 TEMP		V45T1107A1									AS
109-02	ICL	FCP	PRSD	02	TK	1	HTR	B1	-ON		V45X1108E1									AS
109-03	ICL	FCP	PRSD	02	TK	1	HTR	ASSY	2 TEMP		V45T1109A1									AS
109-04	ICL	FCP	PRSD	02	TK	1	HTR	A2	-ON		V45X1111E1									AS
109-05	ICL	FCP	PRSD	02	TK	1	HTR	B2	-ON		V45X1113E1									AS
109-06	ICL	FCP	PRSD	02	TK	2	HTR	A1	-ON		V45X1206E1									AS
109-07	ICL	FCP	PRSD	02	TK	2	HTR	ASSY	1 TEMP		V45T1207A1									AS
109-08	ICL	FCP	PRSD	02	TK	2	HTR	B1	-ON		V45X1208E1									AS
109-09	ICL	FCP	PRSD	02	TK	2	HTR	ASSY	2 TEMP		V45T1209A1									AS
109-10	ICL	FCP	PRSD	02	TK	2	HTR	A2	-ON		V45X1211E1									AS
109-11	ICL	FCP	PRSD	02	TK	2	HTR	B2	-ON		V45X1213E1									AS
109-12	ICL	FCP	PRSD	H2	TK	1	HTR	ASSY	TEMP		V45T2107A1									AS
109-13	ICL	FCP	PRSD	H2	TK	1	HTR	A	-ON		V45X2106E1									AS
109-14	ICL	FCP	PRSD	H2	TK	1	HTR	B	-ON		V45X2108E1									AS
109-15	ICL	FCP	PRSD	H2	TK	2	HTR	ASSY	TEMP		V45T2207A1									AS
109-16	ICL	FCP	PRSD	H2	TK	2	HEATER	A	-ON		V45X2206E1									AS
109-17	ICL	FCP	PRSD	H2	TK	2	HEATER	B	-ON		V45X2208E1									AS
109-18	ICL	FCP	PRSD	02	TK	3	HTR	ASSY	1 TEMP(MBK)		V45T1307A1									AS
109-19	ICL	FCP	PRSD	02	TK	3	HTR	ASSY	2 TEMP(MBK)		V45T1309A1									AS
109-20	ICL	FCP	PRSD	02	TK	3	HTR	A1	-ON (MBK)		V45X1306E1									AS
109-21	ICL	FCP	PRSD	02	TK	3	HTR	B1	-ON (MBK)		V45X1308E1									AS
109-22	ICL	FCP	PRSD	02	TK	3	HTR	A2	-ON (MBK)		V45X1311E1									AS
109-23	ICL	FCP	PRSD	02	TK	3	HTR	B2	-ON (MBK)		V45X1313E1									AS
109-24	ICL	FCP	PRSD	H2	TK	3	HTR	ASSY	TEMP(MBK)		V45T2307A1									AS
109-25	ICL	FCP	PRSD	H2	TK	3	HTR	A	-ON (MBK)		V45X2306E1									AS
109-26	ICL	FCP	PRSD	H2	TK	3	HTR	B	-ON (MBK)		V45X2308E1									AS
109-27	ICL	FCP	PRSD	02	TK	4	HTR	ASSY	1 TEMP(MBK)		V45T1407A1									AS
109-28	ICL	FCP	PRSD	02	TK	4	HTR	ASSY	2 TEMP(MBK)		V45T1409A1									AS
109-29	ICL	FCP	PRSD	02	TK	4	HTR	A1	-ON (MBK)		V45X1406E1									AS
109-30	ICL	FCP	PRSD	02	TK	4	HTR	A2	-ON (MBK)		V45X1411E1									AS
109-31	ICL	FCP	PRSD	H2	TK	4	HTR	ASSY	TEMP(MBK)		V45T2407A1									AS
109-32	ICL	FCP	PRSD	H2	TK	5	HTR	A	-ON (MBK)		V45X2456E1									AS
109-33	ICL	FCP	PRSD	H2	TK	5	HTR	B	-ON (MBK)		V45X2458E1									AS

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
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:	CD	T	:	:	:	DESIGNATOR	SINGL	:	:	:	:
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109-34			ICL	FCP	PRSD 02 TK 5 HTR ASSY 1 TEMP(MBK)	V45T1507A1					PL
109-35			ICL	FCP	PRSD 02 TK 5 HTR ASSY 2 TEMP(MBK)	V45T1509A1					PL
109-36			ICL	FCP	PRSD 02 TK 4/5 HTR B1/A1-ON	V45X1408E1					PL
109-37			ICL	FCP	PRSD 02 TK 4/5 HTR B2/A2-ON	V45X1413E1					AS
109-38			ICL	FCP	PRSD H2 TK 5 HTR ASSY TEMP(MBK)	V45T2507A1					PL
110-00			ICL	HYFU	OMS-L POD HE TANK PRESS 2	V43P4122C1					PL
110-01			ICL	HYOX	RCS L AFT HE OX TANK PRESS-2	V42P2112C1					PL
110-02			ICL	HYFU	OMS-L POD HE TANK PRESS 1	V43P4121C1					PL
110-03			ICL	HYOX	RCS L AFT HE OX TANK PRESS-1	V42P2110C1					PL
110-04			ICL	HYFU	OMS-R POD HE TANK PRESS 2	V43P5122C1					PL
110-05			ICL	HYOX	RCS R AFT HE OX TANK PRESS-2	V42P3112C1					PL
110-06			ICL	HYFU	OMS-R POD HE TANK PRESS 1	V43P5121C1					PL
110-07			ICL	HYOX	RCS R AFT HE OX TANK PRESS-1	V42P3110C1					PL
110-08			ICL	HYOX	RCS FWD HE OX TANK PRESS-2	V42P1112C1					PL
110-09			ICL	HYOX	RCS FWD HE OX TANK PRESS-1	V42P1110C1					PL
110-10			ICL	HYFU	RCS L AFT HE FU TANK PRESS-2	V42P2114C1					PL
110-11			ICL	HYFU	RCS L AFT HE FU TANK PRESS-1	V42P2113C1					PL
110-12			ICL	HYFU	RCS R AFT HE FU TANK PRESS-2	V42P3114C1					PL
110-13			ICL	HYFU	RCS R AFT HE FU TANK PRESS-1	V42P3113C1					PL
110-14			ICL	HYFU	RCS FWD HE FU TANK PRESS-2	V42P1114C1					PL
110-15			ICL	HYFU	RCS FWD HE FU TANK PRESS-1	V42P1113C1					PL
110-16			ICL	HYOX	RCS L AFT HE OX TANK TEM-1	V42T2100C1					PL
110-17			ICL	HYFU	RCS L AFT HE FU TANK TEM-1	V42T2104C1					PL
110-18			ICL	HYFU	OMS-L POD HE TANK TEM-UPPER	V43T4111C1					PL
110-19			ICL	HYOX	RCS R AFT HE OX TANK TEMP-1	V42T3100C1					PL
110-20			ICL	HYFU	RCS R AFT HE FU TANK TEMP-1	V42T3104C1					PL
110-21			ICL	HYFU	OMS-R POD HE TANK TEMP UPPER	V43T5111C1					PL
110-22			ICL	HYOX	RCS FWD HE OX TANK TEMP-1	V42T1100C1					PL
110-23			ICL	HYFU	RCS FWD HE FU TANK TEMP-1	V42T1104C1					PL
110-24					\$ DELETED \$						
110-25					\$ DELETED \$						
110-26					\$ DELETED \$						
110-27					\$ DELETED \$						
110-28			K	ICL	HYFU	RCS FWD FU TANK ULLAGE PRESS	V42P1116C1				
110-29			K	ICL	HYOX	RCS FWD OX TANK ULLAGE PRESS	V42P1115C1				
110-30			K	ICL	HYFU	RCS L AFT FU TANK ULLAGE PRESS	V42P2116C1				
110-31			K	ICL	HYOX	RCS L AFT OX TANK ULLAGE PRESS	V42P2115C1				
110-32			K	ICL	HYFU	RCS R AFT FU TANK ULLAGE PRESS	V42P3116C1				
110-33			K	ICL	HYOX	RCS R AFT OX TANK ULLAGE PRESS	V42P3115C1				
110-34			K	ICL	HYFU	A80497 FR FU PT743 PR	GMMP3029A				

SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
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:	CLOCK	E	:	:	DESIGNATOR	SINGL	:	:	:	:
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110-35	K	ICL	HYFU	A80503 FR FU PT743 PR	GMP3025A					
110-36	K	ICL	HYFU	A100531 PRT LHRO FU PT743 PR	GMP3113A					
110-37	K	ICL	HYFU	A112269 RHR FU PT743 PR	GMP3237A					
110-38	K	ICL	HYOX	A80498 FR OX PT742 PR	GN0P3029A					
110-39	K	ICL	HYOX	A80504 FR OX PT742 PR	GN0P3025A					
110-40	K	ICL	HYOX	A100532 PRT RHRO OX PT742 PR	GN0P3113A					
110-41	K	ICL	HYFU	A100523 PRT LH0 FU PT743 PR	GMP3115A					
110-42	K	ICL	HYFU	A100533 PRT LH0 FU PT743 PR	GMP3124A					
110-43	K	ICL	HYFU	A111727 LHR FU PT743 PR	GMP3103A					
110-44	K	ICL	HYFU	A100573 PRT RHRO FU PT743 PR	GMP3218A					
110-45	K	ICL	HYFU	A101097 PRT RHO FU PT743 PR	GMP3211A					
110-46	K	ICL	HYOX	A100524 PRT RHO OX PT742 PR	GN0P3115A					
110-47	K	ICL	HYOX	A100534 PRT RHO OX PT742 PR	GN0P3124A					
110-48	K	ICL	HYOX	A111728 RHR OX PT742 PR	GN0P3103A					
110-49	K	ICL	HYOX	A112270 LHR OX PT742 PR	GN0P3237A					
110-50	K	ICL	HYFU	A100571 PRT RHO FU PT743 PR	GMP3207A					
110-51	K	ICL	HYOX	A100574 PRT LHRO OX PT742 PR	GN0P3218A					
110-52	K	ICL	HYOX	A101098 PRT LH0 OX PT742 PR	GN0P3211A					
110-53	K	ICL	HYOX	A100572 PRT LH0 OX PT742 PR	GN0P3207A					
110-60	V	ICL	HYOX	FRC5 PROP TK PRESS	V42P1210C1					
110-61	V	ICL	HYOX	LARC PROP TK PRESS	V42P2210C1					
110-62	V	ICL	HYOX	RARC PROP TK PRESS	V42P3210C1					
110-63	V	ICL	HYOX	LOMS PROP TK PRESS	V43P4221C1					
110-64	V	ICL	HYOX	ROMS PROP TK PRESS	V43P5221C1					
110-65	V	ICL	HYOX	RGN GN2 TANK PRESS	V43P5547C1					
110-66	V	ICL	HYOX	RGN GN2 TANK PRESS	V43P5548C1					
110-67	V	ICL	HYOX	LGN GN2 TANK PRESS	V43P4547C1					
110-68	V	ICL	HYOX	LGN GN2 TANK PRESS	V43P4548C1					
110-69	V	ICL	HYFU	FRC5 PROP TK PRESS	V42P1310C1					
110-70	V	ICL	HYFU	LARC PROP TK PRESS	V42P2310C1					
110-71	V	ICL	HYFU	RARC PROP TK PRESS	V42P3310C1					
110-72	V	ICL	HYFU	LOMS PROP TK PRESS	V43P4321C1					
110-73	V	ICL	HYFU	ROMS PROP TK PRESS	V43P5321C1					
111-00	ICL	BELE	LH VOLTAGE OPERATIONAL	BUS A	B76V1600H					
111-01	ICL	BELE	LH VOLTAGE OPERATIONAL	BUS B	B76V1601H					
111-02	ICL	BELE	RH VOLTAGE OPERATIONAL	BUS A	B76V2600H					
111-03	ICL	BELE	RH VOLTAGE OPERATIONAL	BUS B	B76V2601H					
112-00	K	ACL	BHYD	6684 LOW FLOW GPM	GHYR2367A					
112-01	K	ACL	BHYD	6685 LOW FLOW GPM	GHYR2667A					

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
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112-02	K	ACL	BHYD	6687	LOW FLOW GPM					GHYR2967A	
112-03	K	ACL	BHYD	6688	LOW FLOW GPM					GHYR3267A	
112-04		ACL	BHYD	HRS	6684 BYPASS VALVE OPEN CMD					GHYK2260ER	
112-05		ACL	BHYD	HRS	6684 BYPASS VALVE CLOSE CMD					GHYK2270ER	
112-06		ACL	BHYD	HRS	6685 BYPASS VALVE OPEN					GHYK2560ER	
112-07		ACL	BHYD	HRS	6685 BYPASS VALVE CLOSE					GHYK2570ER	
112-08		ACL	BHYD	HRS	6687 BYPASS VALVE OPEN					GHYK2860ER	
112-09		ACL	BHYD	HRS	6687 BYPASS VALVE CLOSE					GHYK2870ER	
112-10		ACL	BHYD	HRS	6688 BYPASS VALVE OPEN					GHYK3160ER	
112-11		ACL	BHYD	HRS	6688 BYPASS VALVE CLOSE					GHYK3170ER	
112-12		ACL	BHYD	6684	RETURN PRESSURE					GHYP2365A	
112-13		ACL	BHYD	6685	RETURN PRESSURE					GHYP2665A	
112-14		ACL	BHYD	6687	RETURN PRESSURE					GHYP2965A	
112-15		ACL	BHYD	6688	RETURN PRESSURE					GHYP3265A	
112-16		ACL	BHYD	6683	PUMP NO 1 TEMPERATURE					GHYT0286A	
112-17		ACL	BHYD	6683	PUMP NO 2 TEMPERATURE					GHYT0288A	
112-18		ACL	BHYD	6686	PUMP NO 1 TEMPERATURE					GHYT0586A	
112-19		ACL	BHYD	6686	PUMP NO 2 TEMPERATURE					GHYT0588A	
112-20		ACL	BHYD	6684	BYPASS VALVE OPEN					GHYX2262E	
112-21		ACL	BHYD	6684	BYPASS VALVE CLOSE					GHYX2263E	
112-22		ACL	BHYD	6685	BYPASS VALVE OPEN					GHYX2562E	
112-23		ACL	BHYD	6685	BYPASS VALVE CLOSE					GHYX2563E	
112-24		ACL	BHYD	6687	BYPASS VALVE OPEN					GHYX2862E	
112-25		ACL	BHYD	6687	BYPASS VALVE CLOSE					GHYX2863E	
112-26		ACL	BHYD	6688	BYPASS VALVE OPEN					GHYX3162E	
112-27		ACL	BHYD	6688	BYPASS VALVE CLOSE					GHYX3163E	
112-28		ACL	BHYD	LH RATE	APU A TURBINE SPEED SNR 2	B46R1408C1					
112-29		ACL	BHYD	LH RATE	APU B TURBINE SPEED SNR 2	B46R1409C1					
112-30		ACL	BHYD	RH RATE	APU A TURBINE SPEED SNR 2	B46R2408C1					
112-31		ACL	BHYD	RH RATE	APU B TURBINE SPEED SNR 2	B46R2409C1					
112-32		ACL	BHYD	LH POSITION	TVC ROCK ACTUATOR	B58H1150C1					
112-33		ACL	BHYD	LH POSITION	TVC TILT ACTUATOR	B58H1151C1					
112-34		ACL	BHYD	RH POSITION	TVC ROCK ACTUATOR	B58H2150C1					
112-35		ACL	BHYD	RH POSITION	TVC TILT ACTUATOR	B58H2151C1					
112-36				\$	DELETED \$						
112-37				\$	DELETED \$						
112-38				\$	DELETED \$						
112-39				\$	DELETED \$						
112-40		ACL	BHYD	AFT SKIRT	GN2 PURGE TEMP					GHYT8013A	
112-41		ACL	BHYD	AFT SKIRT	PURGE GN2 PRES					GHYP8014A	
112-42		ACL	BHYD	HRS	6430 AFT SKIRT PURG HTR ON C					GHYK8002ER	

: SEQ	: TIME	: I	: FUNC	: DISC	: NOMENCLATURE	: FUNCTION	: VALUE	: ELSE	: DURATION	: LCC	: S
:	: CD	: T	:	:	:	:	:	:	:	:	: S
:	: CLOCK	: E	:	:	:	:	:OR LO	: HIGH	: UNIT	: PAGE	: F
:	:	:	:	:	:	:	:	:	:	:	: D
112-43			ICL	BHYD	LH TEMP GAS GENERATOR BED SYS A	B46I1503C1					
112-44			ICL	BHYD	LH TEMP GAS GENERATOR BED SYS B	B46T1504C1					
112-45			ICL	BHYD	RH TEMP GAS GENERATOR BED SYS A	B46T2503C1					
112-46			ICL	BHYD	RH TEMP GAS GENERATOR BED SYS B	B46T2504C1					
112-47			CMD	BHYD	LH APU A GG HTR 2 ON CMD	B46K3023XL OFF					
112-48			CMD	BHYD	LH APU B GG HTR 2 ON CMD	B46K3025XL OFF					
112-49			CMD	BHYD	RH APU A GG HTR 2 ON CMD	B46K4023XL OFF					
112-50			CMD	BHYD	RH APU B GG HTR 2 ON CMD	B46K4025XL OFF					
112-51			CMD	BHYD	LH APU A GG HTR 1 ON CMD	B46K3022XL ON					
112-52			CMD	BHYD	LH APU B GG HTR 1 ON CMD	B46K3024XL ON					
112-53			CMD	BHYD	RH APU A GG HTR 1 ON CMD	B46K4022XL ON					
112-54			CMD	BHYD	RH APU B GG HTR 1 ON CMD	B46K4024XL ON					
114-00							\$ DELETED	\$			
114-01							\$ DELETED	\$			
114-02							\$ DELETED	\$			
114-03			ACL	MPS	MPS-ENG NO 2 HELIUM SUPPLY PRESS	V41P1250C1					
114-04			ACL	MPS	MPS-ENG NO 3 HELIUM SUPPLY PRESS	V41P1350C1					
114-05							\$ DELETED	\$			
114-06							\$ DELETED	\$			
114-07							\$ DELETED	\$			
114-08							\$ DELETED	\$			
115-00			ACL	SSME	MPENG GN2 PRG OUT PRESS	GGNP1034A					
115-01			ACL	SSME	MPENG GN2 PRG OUT PRESS(R)	GGNP1139A					
116-00			ACL	PVD	L FWD VENTS 1/2 CLOSED 1	V59X3005X1					
116-01			ACL	PVD	L FWD VENTS 1/2 CLOSED 2	V59X3015X1					
116-02			ACL	PVD	L AFT VENTS 8/9 CLOSED 1	V59X3805X1					
116-03			ACL	PVD	L AFT VENTS 8/9 CLOSED 2	V59X3815X1					
116-04			ACL	PVD	R FWD VENTS 1/2 CLOSED 1	V59X4005X1					
116-05			ACL	PVD	R FWD VENTS 1/2 CLOSED 2	V59X4015X1					
116-06			ACL	PVD	R AFT VENTS 8/9 CLOSED 1	V59X4805X1					
116-07			ACL	PVD	R AFT VENTS 8/9 CLOSED 2	V59X4815X1					
116-08			K	ACL	PVD N COIL INLET PRESS (PRI)IND	GEC2000A					
116-09			K	ACL	PVD ORB B DUCT FLOW DIFF PRESS INC	GEC2261A					
116-10			A	ACL	GOX GOX VENT PURGE CNTL TEMP IND	GECT2811A					
116-11			A	ACL	GOX GOX VENT PURGE HEATER TNK TEMP I	GECT2816A					
116-12			K	ACL	PVD N COIL INLET PRESS (SEC)IND	GEC24000A					
116-13			A	ACL	GOX GOX VENT PURGE TEMP MONITOR IND	GECT4811A					
116-14			B	ACL	GOX A138439 NE HOOD SEAL TEMP	GSAT9311A					

DATE 12 35 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S90C5 - L

SEQ	TIME	CD	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	DESIGNATOR	SINGL	:	:	:	:
:	:	:	:	:	:	:	:	OR LO	HIGH	UNIT	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:
116-15	B	ACL	GOX	A138439	NE HOOD SEAL TEMP	GSAT9316A						
116-16	B	ACL	GOX	A138440	SW HOOD SEAL TEMP	GSAT9301A						
116-17	B	ACL	GOX	A138440	SW HOOD SEAL TEMP	GSAT9306A						
116-18	B	ACL	GOX	A151887	HTR CHAMBER TEMP	GSAT9141A						
116-19	B	ACL	GOX	A151887	HTR CHAMBER TEMP	GSAT9146A						
117-00	ACL	FCP	PRSD	FCP 1 02	REAC VLV-OPEN	V45X1150E1						
117-01	ACL	FCP	PRSD	FCP 2 02	REAC VLV-OPEN	V45X1155E1						
117-02	ACL	FCP	PRSD	FCP 3 02	REAC VLV-OPEN	V45X1160E1						
117-03	ACL	FCP	PRSD	FCP 1 H2	REAC VLV-OPEN	V45X2150E1						
117-04	ACL	FCP	PRSD	FCP 2 H2	REAC VLV-OPEN	V45X2155E1						
117-05	ACL	FCP	PRSD	FCP 3 H2	REAC VLV-OPEN	V45X2160E1						
118-00	ACL	BRS	RSS	OK TO LAUNCH	IND NO. 1	GRSX2100E						
118-01	ACL	BRS	RSS	OK TO LAUNCH	IND NO. 2	GRSX2102E						

DATE	TIME	CD	CLOCK	SEQ	S	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE	UNIT	LO	HIGH	
12-10-85																			OMI S9005 - L
119-00																			
120-00																			
120-01																			
121-00																			
122-00																			
122-01																			
124-00																			
125-00																			
125-01																			
125-02																			
125-03																			
125-04																			
125-05																			
125-06																			
126-00																			
126-01																			
126-02																			
126-03																			
126-50																			
126-51																			

\*\*\*\*\*  
 LABL INTG OAA MILESTONE  
 \*\*\*\*\* MOAA  
 \*\*\*\*\*  
 \$ GLS EVENT COMPLETE = 450 \$

\$ NOTICE: THIS MILESTONE DOES NOT HOLD FOR  
 DOWSTREAM HOLD INDICATIONS \$

\*\*\*\*\*  
 \$ GLS EVENT COMPLETE = 449 \$

127-00 -07:28

\$ UNLOCK OAA \$

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
128-00	K	CMD	ARMS		OAA UNLOCK PRI EXTEND LOCK V	GSAX7120E	ON				
128-01	K	CMD	ARMS		OAA UNLOCK SEC EXTEND LOCK V	GSAX7140E	ON				
128-02	K	CMD	ARMS		OAA UNLOCK PRI EXTEND LOCK V	GSAX7125E	ON				
128-03	K	CMD	ARMS		OAA UNLOCK SEC EXTEND LOCK V	GSAX7145E	ON				
128-04	K	CMD	ARMS		OAA LCHBACK SPLY V-UNLATCH	GSAX7510E	ON				
128-05	K	CMD	ARMS		OAA LCHBACK SPLY V-UNLATCH	GSAX7515E	ON				

\$ GLS EVENT COMPLETE = 447 \$

129-00 -07:26

130-00	K	CMD	ARMS		OAA LCHBACK SPLY V UNLATCH	GSAX7510E	OFF				
130-01	K	CMD	ARMS		OAA LCHBACK SPLY V UNLATCH	GSAX7515E	OFF				

\$ VFY OAA UNLOCK \$

131-00	K	VFY	ARMS		A EXTEND TOP UNLOCKED SW	GSAX7551E	ON	1 OF 4			
131-01	K	VFY	ARMS		A EXTEND TOP UNLOCKED SW	GSAX7556E	ON	1 OF 4			3.1-13
131-02	K	VFY	ARMS		A EXTEND TOP LOCKED SW	GSAX7541E	OFF	1 OF 4			3.1-13
131-03	K	VFY	ARMS		A EXTEND TOP LOCKED SW	GSAX7546E	OFF	1 OF 4			3.1-13
131-04	K	VFY	ARMS		A EXTEND BOTTOM UNLOCKED SW	GSAX7571E	ON	GTO ST200			3.1-13
131-05	K	VFY	ARMS		A EXTEND BOTTOM UNLOCKED SW	GSAX7576E	ON	1 OF 4			3.1-12
131-06	K	VFY	ARMS		A EXTEND BOTTOM LOCKED SW	GSAX7561E	OFF	1 OF 4			3.1-12
131-07	K	VFY	ARMS		A EXTEND BOTTOM LOCKED SW	GSAX7566E	OFF	GTO ST200			3.1-12

\$ VFY OAA UNLATCH \$

132-00	K	VFY	ARMS		A HINGESIDE UNLATCHED SW	GSAX7111E	OFF	1 OF 4			
132-01	K	VFY	ARMS		A HINGESIDE LATCHED SW	GSAX7116E	OFF	1 OF 4			
132-02	K	VFY	ARMS		A HINGESIDE UNLATCHED SW	GSAX7112E	ON	1 OF 4			
132-03	K	VFY	ARMS		A HINGESIDE UNLATCHED SW	GSAX7117E	ON	GTO ST200			
132-04	K	VFY	ARMS		A OUTSIDE LATCHED SW	GSAX7113E	OFF	1 OF 4			
132-05	K	VFY	ARMS		A OUTSIDE LATCHED SW	GSAX7118E	OFF	1 OF 4			
132-06	K	VFY	ARMS		A OUTSIDE UNLATCHED SW	GSAX7114E	ON	1 OF 4			
132-07	K	VFY	ARMS		A OUTSIDE UNLATCHED SW	GSAX7119E	ON	GTO ST200			

\$ CLOSE INHIBIT VALVE \$



DATE	TIME	SEQ	CD	CLOCK	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
12-10-85													OMI S9005 - L	
GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33														
132-08		K	CMD	ARMS	0AA	CLOSE	GN2	INHIBIT V	GS AK7100E	ON				
132-09		K	CMD	ARMS	0AA	CLOSE	GN2	INHIBIT V	GS AK7105E	ON				
133-00		V	VFY	ARMS	B	LAUNCH	POS	RETR ENABLE IND	XEGXVB03E	ON	1 OF 2			
133-01		V	VFY	ARMS	A	LAUNCH	POS	RETR ENABLE IND	XEGXVC03E	ON	GTO ST200			
133-02		V	CMD	ARMS	B	LAUNCH	POS	RETR	XEGKVB11E	ON				
133-03		V	CMD	ARMS	A	LAUNCH	POS	RETR	XEGKVC11E	ON				
134-00	-07:24													
\$ GLS EVENT COMPLETE = 444 \$														
135-00		K	CMD	ARMS	0AA	OPEN	PRI	RETRACT SUPPLY V	GS AK7210E	ON				
135-01		K	CMD	ARMS	0AA	OPEN	SEC	RETRACT SUPPLY V	GS AK7250E	ON				
135-02		K	CMD	ARMS	0AA	OPEN	PRI	RETRACT SUPPLY V	GS AK7215E	ON				
135-03		K	CMD	ARMS	0AA	OPEN	SEC	RETRACT SUPPLY V	GS AK7255E	ON				
135-04		K	CMD	ARMS	0AA	OPEN	PRI	RETRACT RETURN V	GS AK7230E	ON				
135-05		K	CMD	ARMS	0AA	OPEN	SEC	RETRACT RETURN V	GS AK7270E	ON				
135-06		K	CMD	ARMS	0AA	OPEN	PRI	RETRACT RETURN V	GS AK7235E	ON				
135-07		K	CMD	ARMS	0AA	OPEN	SEC	RETRACT RETURN V	GS AK7275E	ON				
\$ GLS EVENT COMPLETE = 443 \$														
136-00	ST200													
\$ 0AA RETRACT BYPASS BRANCH POINT \$														
\$ CONFIGURE 0AA FOR EXTEND WHEN RETRACTED \$														
136-01		K	CVFY	ARMS	A	FULLY	RETRACTED	SWITCH-REI	GS AX7626E	OFF	1 OF 4			
136-02		K	CVFY	ARMS	A	FULLY	RETRACTED	SWITCH-RET	GS AX7621E	OFF	1 OF 4			
136-03		K	CVFY	ARMS	A	FULLY	RETRACTED	SW-NOT SW	GS AX7636E	ON	1 OF 4			
136-04		K	CVFY	ARMS	A	FULLY	RETRACTED	SW-NO SW	GS AX7631E	ON	CPER P005			
136-50	-05:55													
\$ CCAA RETRACTION VERIFICATION \$														
136-51		V	VFY	ARMS	CCAA	B	LAUNCH	POSN LIMIT STOP IND	XEGXVB13E	ON	1 OF 3			
136-52		V	VFY	ARMS	CCAA	A	LAUNCH	POSN LIMIT STOP IND	XEGXVC13E	ON	1 OF 3			





GLS MAINLINE INHIBITS  
FOR MULTIPLE OCCURRENCE MSMTS.

C to C

CDT (INHIB MAPU)

5/00

B55X1842X1 } BPR ✓  
B55X2842X1 ✓

V46P0153A1 } APU ✓  
V46P0253A1 ✓  
V46P0353A1 ✓

V58P0131A1 ✓ } HYD 0137 ✓  
V58P0137A1 ✓ 0237 ✓  
V58P0167A1 ✓ 0337 ✓  
V58P0231A1 ✓ 0131 ✓  
V58P0237A1 ✓ 0167 ✓  
V58P0267A1 ✓ 0231 ✓  
V58P0331A1 ✓ 0267 ✓  
V58P0337A1 ✓ 0331 ✓  
V58P0367A1 ✓ 0367 ✓

-4/00 CDT (INHIB MPS4)

E41J1513B1 } SSME  
E41J2513B1  
E41J3513B1

-1/57 (INHIB MSEQ TIC MLH2)

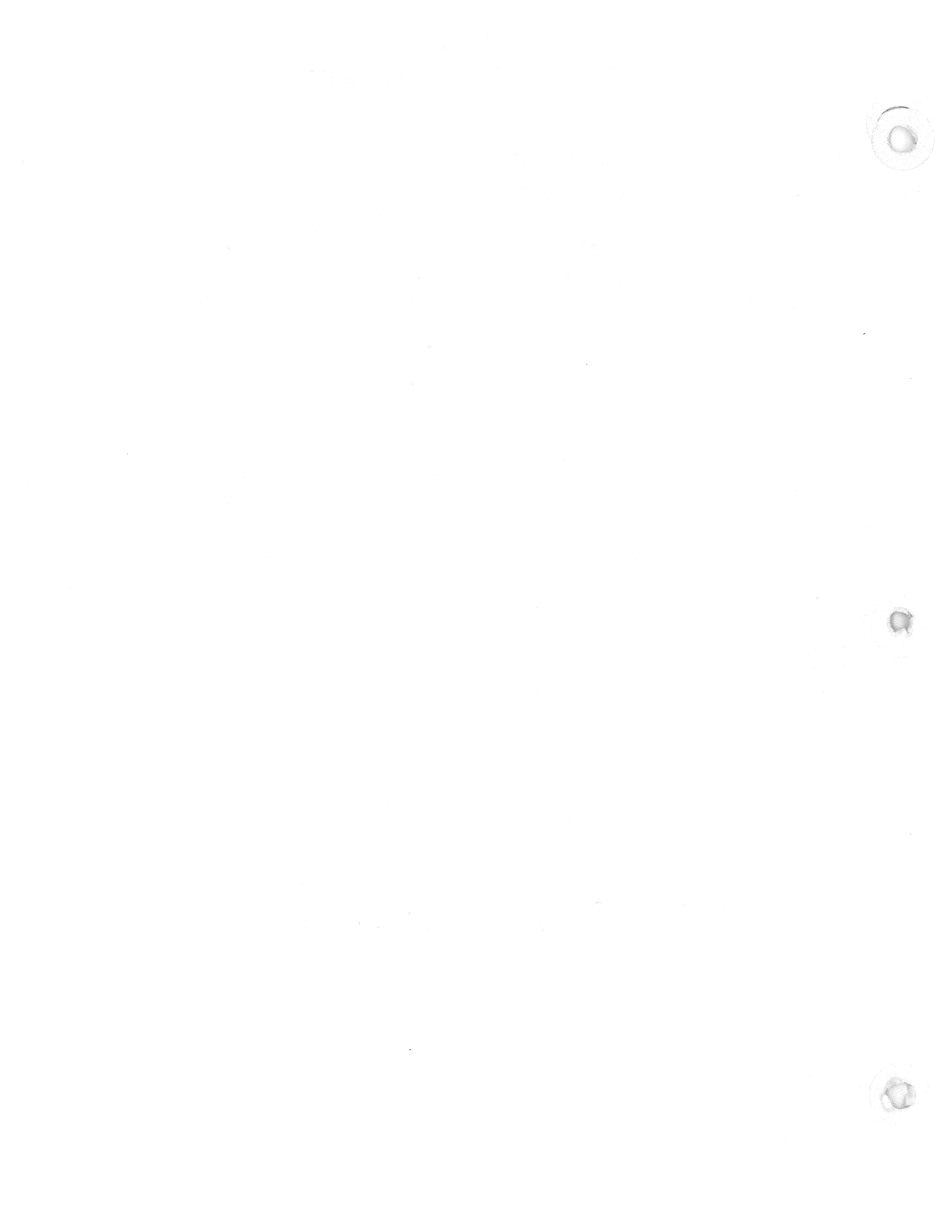
E41J1513B1 } SSME  
E41J2513B1  
E41J3513B1

GMSU5503A } Centaur  
GMSU6503A  
GMSV7503A  
GMSU8503A

0-16 LCC  
32-46 MIP pre T-9

100 300 mainline

LCC-3 31 secs  
LCC-4 good - 10 secs





DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S9005 - L :

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
		CD	T			DESIGNATOR	SINGL			PAGE	S
		CLOCK	E				FOR LO	HIGH	UNIT		F

142-00 \$ MOVED TO SEQ 186-01 \$  
 142-01 \$ MOVED TO SEQ 186-02 \$  
 142-02 \$ MOVED TO SEQ 186-03 \$  
 142-03 \$ MOVED TO SEQ 186-04 \$  
 142-04 \$ MOVED TO SEQ 186-05 \$

143-00 -05:03

\$ RECORDER STATUS \$

144-00	VFY	INST	RCDR	OP51	BITE	V75X2529E1	ON	3 OF 3	6.9.6-5		
144-01	VFY	INST	RCDR	OP51	HEADTEMP	V75T2517A1	N0L0	DEGF	6.9.6-5		
144-02	VFY	INST	RCDR	OP5	1 TAPE MOTION	V75X2523E1	ON	OR	6.9.6-5		
144-03	VFY	INST	RCDR	OP52	BITE	V75X2629E1	ON	3 OF 3	6.9.6-5		
144-04	VFY	INST	RCDR	OP52	HEADTEMP	V75T2617A1	N0L0	DEGF	6.9.6-5		
144-05	VFY	INST	RCDR	OP5	2 TAPE MOTION	V75X2623E1	ON	INHB MAPU	6.9.6-5		

\$ OAA RETRACTION VERIFICATION \$

145-00	K	VFY	ARMS	A	FULLY RETRACTED SWITCH - RET	GSAX7626E	ON	1 OF 4	3.1-16		
145-01	K	VFY	ARMS	A	FULLY RETRACTED SWITCH - RET	GSAX7621E	ON	1 OF 4	3.1-16		
145-02	K	VFY	ARMS	OAA	POSITION INDICATION	GSAX7831A	N0L0	DEG	3.1-16		
145-03	K	VFY	ARMS	CAA	POSITION INDICATOR	GSAX7836A	N0L0	DEG	3.1-16		

146-00 -05:00

\$ GLS EVENT COMPLETE = 300 \$

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LABL INTG APU START MILESTONE MAPU

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147-01	VFY	INTG	GLS-GO	FOR	PURGE SEQ. 4	MPS4	ON	INHB MAPU			
147-02	VFY	INTG	GLS-GO	FOR	ET L02 PRE-PRESSURIZI	MLOX	ON	INHB MAPU			
147-03	VFY	INTG	GLS-GO	FOR	ET LH2 REPLN TERM	MLH2	ON	INHB MAPU			
147-04	VFY	INTG	GLS-GO	FOR	AUTO SEQ START	MSEQ	ON	INHB MAPU			
147-05	VFY	INTG	GLS-GO	FOR	S5ME IGNITION	MENG	ON	INHB MAPU			
147-06	VFY	INTG	GLS-GO	FOR	SRB IGNITION	MSRB	ON	INHB MAPU			
147-07	VFY	INTG	RSS	MANUAL	HOLD		ON	INHB MAPU			
147-08	VFY	INTG	NTD	MANUAL	HOLD		ON	INHB MAPU			
147-09	VFY	INTG	GLS	MANUAL	HOLD		ON	INHB MAPU			





DATE	TIME	SEQ	CD	CLOCK	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
12-10-85								GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33						OMI S9005 - L
153-06								CVFY BPYR LH EVENT IGN S/A DEVICE ARMED	B55X1842X1 ON		INHB MSRB			2.4-6
153-07								CVFY BPYR RH EVENT IGN S/A DEVICE ARMED	B55X2842X1 ON		INHB MSRB			2.4-6
153-08								VFY BPYR LH EVENT IGN S/A DEVICE SAFED	B55X1843X1 OFF		INHB MPS4			2.4-7
153-09								VFY BPYR RH EVENT IGN S/A DEVICE SAFED	B55X2843X1 OFF		INHB MPS4			2.4-7
153-10								VFY BRS LH CURRENT RSS BATTERY NO 1	B55C1051C1 .02	.75	AMP			2.4-19
153-11								VFY BRS RH CURRENT RSS BATTERY NO 1	B55C2051C1 .02	.75	AMP			2.4-19
153-12								\$ DELETED						
154-00														
								\$ GLS EVENT COMPLETE = 270 \$						
155-00								\$ TURN OFF MAIN FUEL VALVE HEATERS \$						
155-01								CMD SSME ME-1 MFV HEATER PWR ON CMD	GGNK1020E	OFF				
155-02								CMD SSME ME-1 MFV HEATER PWR ON (R) CMD	GGNK1110E	OFF				
155-03								CMD SSME ME-1 MFV HEATER PWR OFF CMD	GGNK1021E	ON				
155-04								CMD SSME ME-1 MFV HEATER PWR OFF (R) CMD	GGNK1141E	ON				
155-05								CMD SSME ME-2 MFV HEATER PWR ON CMD	GGNK1040E	OFF				
155-06								CMD SSME ME-2 MFV HEATER PWR ON (R) CMD	GGNK1150E	OFF				
155-07								CMD SSME ME-2 MFV HEATER PWR OFF CMD	GGNK1041E	ON				
155-08								CMD SSME ME-2 MFV HEATER PWR OFF (R) CMD	GGNK1151E	ON				
155-09								CMD SSME ME-3 MFV HEATER PWR ON CMD	GGNK1060E	OFF				
155-10								CMD SSME ME-3 MFV HEATER PWR ON (R) CMD	GGNK1170E	OFF				
155-11								CMD SSME ME-3 MFV HEATER PWR OFF CMD	GGNK1061E	ON				
156-00								\$ GLS EVENT COMPLETE = 268 \$						
157-00								\$ ENGINE HE SUPPLY TEMP CHECK \$						
157-01								VFY MPS E-1 AFT FUSLG HELIUM SUPPLY TEMP	V41T1151A1 10	95	DEGF	1 OF 3		6.2.1-4
157-02								VFY MPS E-2 AFT FUSLG HELIUM SUPPLY TEMP	V41T1251A1 10	95	DEGF	1 OF 3		6.2.1-4
157-03								VFY MPS E-3 AFT FUSLG HELIUM SUPPLY TEMP	V41T1351A1 10	95	DEGF	INHB MPS4		6.2.1-4
157-04								VFY MPS E-1 MID FUSLG HELIUM SUPPLY TEMP	V41T1152A1 60	145	DEGF	1 OF 3		6.2.1-4
157-05								VFY MPS E-2 MID FUSLG HELIUM SUPPLY TEMP	V41T1252A1 60	145	DEGF	1 OF 3		6.2.1-4
157-06								VFY MPS E-3 MID FUSLG HELIUM SUPPLY TEMP	V41T1352A1 60	145	DEGF	INHB MPS4		6.2.1-4

SEQ	TIME	CD	IT	E	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	UNIT	ELSE	DURATION	LCC	PAGE
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158-00 -04:05

\$ ORB HYD SUPPLY PRESS CHECK \$

159-00	VFY	HYD					HYD SYS 1 SUPPLY PRESS B	V58P0115A1	2850	PSIA	INHB	MPS4	6.7.2-3	
159-01	VFY	HYD					HYD SYS 1 SUPPLY PRESS C	V58P0116C1	2800	PSIA	INHB	MPS4	6.7.2-3	
159-02	VFY	HYD					HYD SYS 2 SUPPLY PRESS B	V58P0215A1	2850	PSIA	INHB	MPS4	6.7.2-3	
159-03	VFY	HYD					HYD SYS 2 SUPPLY PRESS C	V58P0216C1	2800	PSIA	INHB	MPS4	6.7.2-3	
159-04	VFY	HYD					HYD SYS 3 SUPPLY PRESS B	V58P0315A1	2850	PSIA	INHB	MPS4	6.7.2-3	
159-05	VFY	HYD					HYD SYS 3 SUPPLY PRESS C	V58P0316C1	2800	PSIA	INHB	MPS4	6.7.2-3	

160-00	VFY	SSME					ME-1 HYDRAULIC PRESSURE	E41P1054B1	2700	NOHI	PSIA	INHB	MPS4	6.2.2-15
160-01	VFY	SSME					ME-2 HYDRAULIC PRESSURE	E41P2054B1	2700	NOHI	PSIA	INHB	MPS4	6.2.2-15
160-02	VFY	SSME					ME-3 HYDRAULIC PRESSURE	E41P3054B1	2700	NOHI	PSIA	INHB	MPS4	6.2.2-15

\$ HYD CIRC PUMP LEAKAGE CHECK \$

161-00	CVFY	HYD					HYD SYS 1 CIRC PUMP PRESS	V58P0137A1	N0L0	PSIA	INHB	MSEQ	6.7.2-5	
161-01	CVFY	HYD					HYD SYS 2 CIRC PUMP PRESS	V58P0237A1	N0L0	PSIA	INHB	MSEQ	6.7.2-5	
161-02	CVFY	HYD					HYD SYS 3 CIRC PUMP PRESS	V58P0337A1	N0L0	PSIA	INHB	MSEQ	6.7.2-5	

\$ APU LUBE SYS CK-POST START \$

162-00	CVFY	APU					APU 1 GRBX GN2 PRESS	V46P0151A1	5.5	29.5	PSIA	INHB	MSEQ	6.6-22
162-01	CVFY	APU					APU 1 GRBX LUBE OIL OUTPRESS	V46P0153A1	N0L0	140	PSIA	INHB	MSEQ	6.6-22
162-02	CVFY	APU					APU 2 GRBX GN2 PRESS	V46P0251A1	5.5	29.5	PSIA	INHB	MSEQ	6.6-22
162-03	CVFY	APU					APU 2 GRBX LUBE OIL OUTPRESS	V46P0253A1	N0L0	140	PSIA	INHB	MSEQ	6.6-22
162-04	CVFY	APU					APU 3 GRBX GN2 PRESS	V46P0351A1	5.5	29.5	PSIA	INHB	MSEQ	6.6-22
162-05	CVFY	APU					APU 3 GRBX LUBE OIL OUTPRESS	V46P0353A1	N0L0	140	PSIA	INHB	MSEQ	6.6-22

163-00 -04:00

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 LABL INTG PURGE SEQ 4 MILESTONE MPS4  
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\$ GLS EVENT COMPLETE = 240 \$

164-01	VFY	INTG					GLS-GO FOR ET L02 PRE-PRESSURIZI	MLOX	ON		INHB	MPS4		
164-02	VFY	INTG					GLS-GO FOR ET LH2 REPLN TERM	MLH2	ON		INHB	MPS4		
164-03	VFY	INTG					GLS-GO FOR AUTO SEQ START	MSEQ	ON		INHB	MPS4		

SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
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164-04 VFY INTG GLS-GO FOR SSME IGNITION MENS ON INHB MPS4  
 164-05 VFY INTG GLS-GO FOR SRB IGNITION MSRB ON INHB MPS4  
 164-06 VFY INTG RSS MANUAL HOLD ON INHB MPS4  
 164-07 VFY INTG NTD MANUAL HOLD ON INHB MPS4  
 164-08 VFY INTG GLS MANUAL HOLD ON INHB MPS4

164-09 VFY INTG GLS-GO FOR PURGE SEQ 4 MPS4 ON HOLD  
 164-10 MMSG INTG -02:55 GO FOR ET L02 PRE-PRESS  
 164-11 MSG GO FOR PURGE SEQ. 4

\$ PURGE SEQ 4 \$  
 \$ GLS EVENT COMPLETE = 239 \$  
 165-00 ISSU SSME ME-1 PURGE SEQ NO. 4 (ISSUE FD) E41K12168L ON  
 165-01 ISSU SSME ME-2 PURGE SEQ NO. 4 (ISSUE FD) E41K22168L ON  
 165-02 ISSU SSME ME-3 PURGE SEQ NO. 4 (ISSUE FD) E41K32168L ON

\$ GLS EVENT COMPLETE = 238 \$  
 \$ LANDING GEAR DEPLOYABLE CK \$  
 166-00 VFY MECH LMG STR ACTR SHUTTLE V GR DN RDY V58X1725E1 ON 6.7.1-28  
 166-01 VFY MECH RMG STR ACTR SHUTTLE V GR DN RDY V58X1775E1 ON 6.7.1-28  
 166-02 VFY MECH NMG STR ACTR SHUTTLE V GR DN RDY V58X1825E1 ON 6.7.1-28

167-00 -03:55

\$ CHECK SSME FOR PURGE SEQUENCE NO. 4 \$  
 168-00 CVFY SSME ME-1 OPERATING MODE E41J151381 B100 INHB MSEQ TIL MLH2  
 168-01 CVFY SSME ME-2 OPERATING MODE E41J251381 B100 INHB MSEQ TIL MLH2  
 168-02 CVFY SSME ME-3 OPERATING MODE E41J351381 B100 INHB MSEQ TIL MLH2  
 168-03 CVFY SSME ME-1 PHASE IN EFFECT E41J151281 B010 INHB MSEQ  
 168-04 CVFY SSME ME-2 PHASE IN EFFECT E41J251281 B010 INHB MSEQ  
 168-05 CVFY SSME ME-3 PHASE IN EFFECT E41J351281 B010 INHB MSEQ

\$ HYD SYS CHECKS \$  
 169-00 CVFY HYD HYD SYS 1 RVSR FLUID PRESS V58P0131A1 60 NOHI PSIA 1 OF 2 6.7.2-10  
 169-01 CVFY HYD SYS 1 GN2 ACCUM PRESS V58P0167A1 2706 NOHI PSIA INHB MSEQ 6.7.2-10  
 169-02 CVFY HYD HYD SYS 2 RVSR FLUID PRESS V58P0231A1 60 NOHI PSIA 1 OF 2 6.7.2-10  
 169-03 CVFY HYD SYS 2 GN2 ACCUM PRESS V58P0267A1 2706 NOHI PSIA INHB MSEQ 6.7.2-10

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169-04	CVFY HYD	HYD SYS 3	RVSR FLUID PRESS	V58P0331A1	60	N0HI	PSIA	1 OF 2		6.7.2-10
169-05	CVFY HYD	SYS 3	GN2 ACCUM PRESS	V58P0367A1	2706	N0HI	PSIA	INH B	MSEQ	6.7.2-10
\$ GLS EVENT COMPLETE = 234 \$										
\$ START AERO-SURFACE PROFILE \$										
170-00	CMD FCL	INITIATE AERO-SURFACE DRIVE CHEC								
170-01	CMD FCL	AERO-SURFACE PROFILE EVAL								
170-02	CVFY APU	APU 1	GRBX BEARING TEMP NO 1	P001	ON			1 OF 2		6.6-24A
170-03	CVFY APU	APU 2	GRBX BEARING TEMP NO 2	P001	ON			INH B	MSEQ	6.6-24A
170-04	CVFY APU	APU 1	GRBX BEARING TEMP NO 1	V46T0161A1	N0LO	335	DEGF	1 OF 2		
170-05	CVFY APU	APU 2	GRBX BEARING TEMP NO 2	V46T0162A1	N0LO	335	DEGF	INH B	MSEQ	
170-06	CVFY APU	APU 1	GRBX BEARING TEMP NO 1	V46T0261A1	N0LO	335	DEGF	1 OF 2		
170-07	CVFY APU	APU 2	GRBX BEARING TEMP NO 2	V46T0262A1	N0LO	335	DEGF	INH B	MSEQ	
170-08	CVFY APU	APU 3	GRBX BEARING TEMP NO 1	V46T0361A1	N0LO	335	DEGF	1 OF 2		
170-09	CVFY APU	APU 3	GRBX BEARING TEMP NO 2	V46T0362A1	N0LO	335	DEGF	INH B	MSEQ	
170-10			\$ DELETED \$							
170-11			\$ DELETED \$							
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170-25			\$ DELETED \$							

171-00 -03:45

\$ MPS HELIUM SYSTEM MONITOR \$										
172-00	CVFY MPS	MPS E-1	HE REG A OUTLET PRESS	V41P1154A1	715	800	PSIA	INH B	MSEQ	6.2.1-5
172-01	CVFY MPS	MPS E-1	HE REG B OUTLET PRESS	V41P1153A1	715	800	PSIA	INH B	MSEQ	6.2.1-5
172-02	CVFY MPS	MPS E-2	HE REG A OUTLET PRESS	V41P1254A1	715	800	PSIA	INH B	MSEQ	6.2.1-5
172-03	CVFY MPS	MPS E-2	HE REG B OUTLET PRESS	V41P1253A1	715	800	PSIA	INH B	MSEQ	6.2.1-5

SEQ : TIME : I : FUNC : DISC : NOMENCLATURE : FUNCTION : VALUE : ELSE : DURATION : LCC : S :  
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 : CLOCK : E : : : : : : OR LO : HIGH : UNIT : : : : : : : F :  
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SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
172-04					MPS E-3 HE REG A OUILET PRESS	V41P1354A1 715	800	PSIA	INHB MSEQ	6.2.1-5	
172-05					MPS E-3 HE REG B OUILET PRESS	V41P1353A1 715	800	PSIA	INHB MSEQ	6.2.1-5	
172-06					PNEU VLV HE RGLTR OUILET PRESS	V41P1605A1 715	800	PSIA	INHB MSEQ	6.2.1-5	
172-07					PNEU HELIUM SUPPLY PRESS	V41P1600A1 4000	4500	PSIA	3 OF 4	6.2.1-2	
172-08					ENG 1 HELIUM SUPPLY PRESS	V41P1150C1 4000	4500	PSIA	3 OF 4	6.2.1-2	
172-09					ENG 2 HELIUM SUPPLY PRESS	V41P1250C1 4000	4500	PSIA	3 OF 4	6.2.1-2	
172-10					ENG 3 HELIUM SUPPLY PRESS	V41P1350C1 4000	4500	PSIA	INHB MSEQ	6.2.1-2	
172-11					\$ DELETED \$						
172-12					\$ DELETED \$						
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173-00 -03:30

CMD	EPDC	GSE	PWR	MN	BUS	A	OFF	CMD	\$ GROUND POWER REMOVAL \$
174-00									
174-01									
174-02									

175-00 CMD FCL INITIATE MPS GIMBAL CHECK P002 ON

175-01 CMD FCL MPS GIMBAL PROFILE EVAL P002 ON

176-00 -03:25 \$ GLS EVENT COMPLETE = 209 \$

177-00	CMD	EPDC	GSE	PWR	MN	BUS	A	OFF	CMD	V76K0192W	OFF	
177-01	CMD	EPDC	GSE	PWR	MN	BUS	B	OFF	CMD	V76K0292W	OFF	
177-02	CMD	EPDC	GSE	PWR	MN	BUS	C	OFF	CMD	V76K0392W	OFF	
177-03	CMD	EPDC	ORB	GND	PWR	MN	BUS	A	CMD	PRI	OFF	
177-04	CMD	EPDC	ORB	GND	PWR	MN	BUS	A	CMD	SEC	OFF	
177-05	CMD	EPDC	ORB	GND	PWR	MN	BUS	B	CMD	PRI	OFF	
177-06	CMD	EPDC	ORB	GND	PWR	MN	BUS	B	CMD	SEC	OFF	
177-07	CMD	EPDC	ORB	GND	PWR	MN	BUS	C	CMD	PRI	OFF	
177-08	CMD	EPDC	ORB	GND	PWR	MN	BUS	C	CMD	SEC	OFF	

178-00 -03:20 \$ GLS EVENT COMPLETE = 204 \$

179-00	VFY	EPDC	GSE	PWR	MN	BUS	A	ON	IND			
179-01	VFY	EPDC	GSE	PWR	MN	BUS	B	ON	IND	V76X0190W	OFF	INH MSEQ
179-02	VFY	EPDC	GSE	PWR	MN	BUS	C	ON	IND	V76X0290W	OFF	INH MSEQ
										V76X0390W	OFF	INH MSEQ

180-00 -03:20 \$ GLS EVENT COMPLETE = 199 \$

180-00	CVFY	FCL	ORB	AEROSURFACE	ACTUATOR	HEALTH	MONITOR					
180-01	CVFY	FCL	RUDDER	DELTA	PRESS	1		V57P0160A1	-850	PSID	INH MSEQ	6.9.10-8
180-02	CVFY	FCL	RUDDER	DELTA	PRESS	2		V57P0161A1	-850	PSID	INH MSEQ	6.9.10-8
180-03	CVFY	FCL	RUDDER	DELTA	PRESS	3		V57P0162A1	-850	PSID	INH MSEQ	6.9.10-8
180-04	CVFY	FCL	RUDDER	DELTA	PRESS	4		V57P0163A1	-850	PSID	INH MSEQ	6.9.10-8
180-05	CVFY	FCL	SPEEDBRAKE	DELTA	PRESS	1		V57P0260A1	-850	PSID	INH MSEQ	6.9.10-8
180-06	CVFY	FCL	SPEEDBRAKE	DELTA	PRESS	2		V57P0261A1	-850	PSID	INH MSEQ	6.9.10-8
180-07	CVFY	FCL	SPEEDBRAKE	DELTA	PRESS	3		V57P0262A1	-850	PSID	INH MSEQ	6.9.10-8
180-08	CVFY	FCL	SPEEDBRAKE	DELTA	PRESS	4		V57P0263A1	-850	PSID	INH MSEQ	6.9.10-8
180-09	CVFY	FCL	R INBD	ELEVON	SEC DELTA	PRESS 1		V58P0912A1	-850	PSID	INH MSEQ	6.9.10-13
180-10	CVFY	FCL	R INBD	ELEVON	SEC DELTA	PRESS 2		V58P0913A1	-850	PSID	INH MSEQ	6.9.10-13
180-11	CVFY	FCL	R INBD	ELEVON	SEC DELTA	PRESS 3		V58P0914A1	-850	PSID	INH MSEQ	6.9.10-13
180-12	CVFY	FCL	R INBD	ELEVON	SEC DELTA	PRESS 4		V58P0915A1	-850	PSID	INH MSEQ	6.9.10-13
180-13	CVFY	FCL	R OUTBD	ELEVON	SEC DELTA	PRESS 1		V58P0962A1	-850	PSID	INH MSEQ	6.9.10-13
								V58P0963A1	-850	PSID	INH MSEQ	6.9.10-13

SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	PSID	INHB	MSEQ	DURATION	LCC	PAGE
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180-14	CVFY	FCL		R	OUTBD	ELEVON	SEC	DELTA	PRESS	3	V58P0964A1	-850	850	PSID	INHB	MSEQ	6.9.10-13
180-15	CVFY	FCL		R	OUTBD	ELEVON	SEC	DELTA	PRESS	4	V58P0965A1	-850	850	PSID	INHB	MSEQ	6.9.10-13
180-16	CVFY	FCL		L	INBD	ELEVON	SEC	DELTA	PRESS	1	V58P0812A1	-850	850	PSID	INHB	MSEQ	6.9.10-13
180-17	CVFY	FCL		L	INBD	ELEVON	SEC	DELTA	PRESS	2	V58P0813A1	-850	850	PSID	INHB	MSEQ	6.9.10-13
180-18	CVFY	FCL		L	INBD	ELEVON	SEC	DELTA	PRESS	3	V58P0814A1	-850	850	PSID	INHB	MSEQ	6.9.10-13
180-19	CVFY	FCL		L	INBD	ELEVON	SEC	DELTA	PRESS	4	V58P0815A1	-850	850	PSID	INHB	MSEQ	6.9.10-13
180-20	CVFY	FCL		L	OUTBD	ELEVON	SEC	DELTA	PRESS	1	V58P0862A1	-850	850	PSID	INHB	MSEQ	6.9.10-13
180-21	CVFY	FCL		L	OUTBD	ELEVON	SEC	DELTA	PRESS	2	V58P0863A1	-850	850	PSID	INHB	MSEQ	6.9.10-13
180-22	CVFY	FCL		L	OUTBD	ELEVON	SEC	DELTA	PRESS	3	V58P0864A1	-850	850	PSID	INHB	MSEQ	6.9.10-13
180-23	CVFY	FCL		L	OUTBD	ELEVON	SEC	DELTA	PRESS	4	V58P0865A1	-850	850	PSID	INHB	MSEQ	6.9.10-13
180-24	CVFY	FCL		R	INBD	ELEVON	PRI	DELTA	PRESS	1	V58P0916C1	-230	230	PSID	INHB	MSEQ	6.9.10-12
180-25	CVFY	FCL		R	INBD	ELEVON	PRI	DELTA	PRESS	2	V58P0917C1	-230	230	PSID	INHB	MSEQ	6.9.10-12
180-26	CVFY	FCL		R	INBD	ELEVON	PRI	DELTA	PRESS	3	V58P0918C1	-230	230	PSID	INHB	MSEQ	6.9.10-12
180-27	CVFY	FCL		R	INBD	ELEVON	PRI	DELTA	PRESS	4	V58P0919C1	-230	230	PSID	INHB	MSEQ	6.9.10-12
180-28	CVFY	FCL		R	OUTBD	ELEVON	PRI	DELTA	PRESS	1	V58P0966C1	-230	230	PSID	INHB	MSEQ	6.9.10-12
180-29	CVFY	FCL		R	OUTBD	ELEVON	PRI	DELTA	PRESS	2	V58P0967C1	-230	230	PSID	INHB	MSEQ	6.9.10-12
180-30	CVFY	FCL		R	OUTBD	ELEVON	PRI	DELTA	PRESS	3	V58P0968C1	-230	230	PSID	INHB	MSEQ	6.9.10-12
180-31	CVFY	FCL		R	OUTBD	ELEVON	PRI	DELTA	PRESS	4	V58P0969C1	-230	230	PSID	INHB	MSEQ	6.9.10-12
180-32	CVFY	FCL		L	INBD	ELEVON	PRI	DELTA	PRESS	1	V58P0816C1	-230	230	PSID	INHB	MSEQ	6.9.10-12
180-33	CVFY	FCL		L	INBD	ELEVON	PRI	DELTA	PRESS	2	V58P0817C1	-230	230	PSID	INHB	MSEQ	6.9.10-12
180-34	CVFY	FCL		L	INBD	ELEVON	PRI	DELTA	PRESS	3	V58P0818C1	-230	230	PSID	INHB	MSEQ	6.9.10-12
180-35	CVFY	FCL		L	INBD	ELEVON	PRI	DELTA	PRESS	4	V58P0819C1	-230	230	PSID	INHB	MSEQ	6.9.10-12
180-36	CVFY	FCL		L	OUTBD	ELEVON	PRI	DELTA	PRESS	1	V58P0866C1	-230	230	PSID	INHB	MSEQ	6.9.10-12
180-37	CVFY	FCL		L	OUTBD	ELEVON	PRI	DELTA	PRESS	2	V58P0867C1	-230	230	PSID	INHB	MSEQ	6.9.10-12
180-38	CVFY	FCL		L	OUTBD	ELEVON	PRI	DELTA	PRESS	3	V58P0868C1	-230	230	PSID	INHB	MSEQ	6.9.10-12
180-39	CVFY	FCL		L	OUTBD	ELEVON	PRI	DELTA	PRESS	4	V58P0869C1	-230	230	PSID	INHB	MSEQ	6.9.10-12

181-00	VFY	FCL			RUDDER	DELTA	PRESS				SUM7	-350	350	PSID	INHB	MSEQ	6.9.10-8
	SUM				RUDDER	DELTA	PRESS	1	SUM7		V57P0160A1						
	SUM				RUDDER	DELTA	PRESS	2	SUM7		V57P0161A1						
	SUM				RUDDER	DELTA	PRESS	3	SUM7		V57P0162A1						
	SUM				RUDDER	DELTA	PRESS	4	SUM7		V57P0163A1						

DATE	TIME	CD	CLOCK	SEQ	S	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	PSID	INHB	MSEQ	OMI		
12-05									GROUND LAUNCH SEQUENCE DESCRIPTION								S9005		
182-00									SPEEDBRAKE DELTA PRESS	SUM8	-350						6.9.10-8		
									SPEEDBRAKE DELTA PRESS 1 SUM8	V57P0260A1									
									SPEEDBRAKE DELTA PRESS 2 SUM8	V57P0261A1									
									SPEEDBRAKE DELTA PRESS 3 SUM8	V57P0262A1									
									SPEEDBRAKE DELTA PRESS 4 SUM8	V57P0263A1									
183-00									R INBD ELEV SEC DELTA P	SUM9	-350						6.9.10-13		
									R INBD ELEV SEC DELTA P 1 SUM9	V58P0912A1									
									R INBD ELEV SEC DELTA P 2 SUM9	V58P0913A1									
									R INBD ELEV SEC DELTA P 3 SUM9	V58P0914A1									
									R INBD ELEV SEC DELTA P 4 SUM9	V58P0915A1									
184-00									R OUTBD ELEV SEC DELTA P	SUM10	-350						6.9.10-13		
									R OUTBD ELEV SEC DELTA P 1 SUM10	V58P0962A1									
									R OUTBD ELEV SEC DELTA P 2 SUM10	V58P0963A1									
									R OUTBD ELEV SEC DELTA P 3 SUM10	V58P0964A1									
									R OUTBD ELEV SEC DELTA P 4 SUM10	V58P0965A1									
185-00									L INBD ELEV SEC DELTA P	SUM11	-350						6.9.10-13		
									L INBD ELEV SEC DELTA P 1 SUM11	V58P0812A1									
									L INBD ELEV SEC DELTA P 2 SUM11	V58P0813A1									
									L INBD ELEV SEC DELTA P 3 SUM11	V58P0814A1									
									L INBD ELEV SEC DELTA P 4 SUM11	V58P0815A1									
186-00									L OUTBD ELEV SEC DELTA P	SUM12	-350						6.9.10-13		
									L OUTBD ELEV SEC DELTA P 1 SUM12	V58P0862A1									
									L OUTBD ELEV SEC DELTA P 2 SUM12	V58P0863A1									
									L OUTBD ELEV SEC DELTA P 3 SUM12	V58P0864A1									
									L OUTBD ELEV SEC DELTA P 4 SUM12	V58P0865A1									
186-01									\$ VERIFICATION OF HELIUM BUBBLING TERM \$										
186-02									ET L02 TANK HE BUBBL DIFF PRESS	GLOP4644A	NOLO	.1		PSID	1	OF	3	5.1-5	
186-03									ET L02 TANK HE BUBBL DIFF PRESS	GLOP4144A	NOLO	.1		PSID	1	OF	3	5.1-5	
186-04									HELIUM BUBBLING SUPPLY PRESS	GLOP4134A	NOLO	125		PSIG	OR			5.1-5	
									HE BUBBLING FLO CNTL VLV(PRI) OP	GLOX4143E	OFF			PSIG	2	OF	2	5.1-5	



DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S90C5 - L :

SEQ : TIME : I : FUNC : DISC : NOMENCLATURE : FUNCTION : VALUE : ELSE : DURATION : LCC : PAGE : S :  
CD : T : : : : : : : : : : : : : : : : S :  
CLOCK : E : : : : : : : : : : : : : : : : F :  
: D :

186-05 VFY L02 HE\_BUBBL\_FL\_CNIL\_VLV (SEC) OP GLOX4643E OFF INHB\_MSEQ 5,1-5

\$ GLS EVENT COMPLETE = 190 \$

187-00 -03:03

\$ ORB HYD SUPPLY PRESS CHECK \$

188-00	CVFY HYD	HYD SYS 1 SUPPLY PRESS B	V58P0115A1	2850	3400	PSIA	INHB_MSEQ	6,7,2-3
188-01	CVFY HYD	HYD SYS 1 SUPPLY PRESS C	V58P0116C1	2800	3400	PSIA	INHB_MSEQ	6,7,2-3
188-02	CVFY HYD	HYD SYS 2 SUPPLY PRESS B	V58P0215A1	2850	3400	PSIA	INHB_MSEQ	6,7,2-3
188-03	CVFY HYD	HYD SYS 2 SUPPLY PRESS C	V58P0216C1	2800	3400	PSIA	INHB_MSEQ	6,7,2-3
188-04	CVFY HYD	HYD SYS 3 SUPPLY PRESS B	V58P0315A1	2850	3400	PSIA	INHB_MSEQ	6,7,2-3
188-05	CVFY HYD	HYD SYS 3 SUPPLY PRESS C	V58P0316C1	2800	3400	PSIA	INHB_MSEQ	6,7,2-3

\$ MPS ENGINE GIMBAL POSITION MONITOR \$

189-00	CVFY FCL	MPS ENG 1 P ACTR POSN	V58H1100A1	-1,12	0,48	DEG	INHB_MSEQ	6,9,10-20
189-01	CVFY FCL	MPS ENG 1 Y ACTR POSN	V58H1150A1	0,98	-0,62	DEG	INHB_MSEQ	6,9,10-20
189-02	CVFY FCL	MPS ENG 2 P ACTR POSN	V58H1200A1	1,12	-0,48	DEG	INHB_MSEQ	6,9,10-20
189-03	CVFY FCL	MPS ENG 2 Y ACTR POSN	V58H1250A1	1,01	-0,59	DEG	INHB_MSEQ	6,9,10-20
189-04	CVFY FCL	MPS ENG 3 P ACTR POSN	V58H1300A1	-1,12	0,48	DEG	INHB_MSEQ	6,9,10-20
189-05	CVFY FCL	MPS ENG 3 Y ACTR POSN	V58H1350A1	1,01	-0,59	DEG	INHB_MSEQ	6,9,10-20

\$ AEROSURFACE POSITION MONITOR \$

190-00	CVFY FCL	L INBD ELEVON ACTR CHAN 1 POSN	V58H0802A1	-0,52	1,18	DEG	INHB_MSEQ	6,9,10-10
190-01	CVFY FCL	L INBD ELEVON ACTR CHAN 2 POSN	V58H0803A1	-0,52	1,18	DEG	INHB_MSEQ	6,9,10-10
190-02	CVFY FCL	L INBD ELEVON ACTR CHAN 3 POSN	V58H0804A1	-0,52	1,18	DEG	INHB_MSEQ	6,9,10-10
190-03	CVFY FCL	L INBD ELEVON ACTR CHAN 4 POSN	V58H0805A1	-0,52	1,18	DEG	INHB_MSEQ	6,9,10-10
190-04	CVFY FCL	L OUTBD ELEVON ACTR CHAN 1 POSN	V58H0852A1	-0,36	1,34	DEG	INHB_MSEQ	6,9,10-10
190-05	CVFY FCL	L OUTBD ELEVON ACTR CHAN 2 POSN	V58H0853A1	-0,36	1,34	DEG	INHB_MSEQ	6,9,10-10
190-06	CVFY FCL	L OUTBD ELEVON ACTR CHAN 3 POSN	V58H0854A1	-0,36	1,34	DEG	INHB_MSEQ	6,9,10-10
190-07	CVFY FCL	L OUTBD ELEVON ACTR CHAN 4 POSN	V58H0855A1	-0,36	1,34	DEG	INHB_MSEQ	6,9,10-10
190-08	CVFY FCL	R INBD ELEVON ACTR CHAN 1 POSN	V58H0902A1	-0,52	1,18	DEG	INHB_MSEQ	6,9,10-10
190-09	CVFY FCL	R INBD ELEVON ACTR CHAN 2 POSN	V58H0903A1	-0,52	1,18	DEG	INHB_MSEQ	6,9,10-10
190-10	CVFY FCL	R INBD ELEVON ACTR CHAN 3 POSN	V58H0904A1	-0,52	1,18	DEG	INHB_MSEQ	6,9,10-10
190-11	CVFY FCL	R INBD ELEVON ACTR CHAN 4 POSN	V58H0905A1	-0,52	1,18	DEG	INHB_MSEQ	6,9,10-10
190-12	CVFY FCL	R OUTBD ELEVON ACTR CHAN 1 POSN	V58H0952A1	-0,36	1,34	DEG	INHB_MSEQ	6,9,10-10
190-13	CVFY FCL	R OUTBD ELEVON ACTR CHAN 2 POSN	V58H0953A1	-0,36	1,34	DEG	INHB_MSEQ	6,9,10-10
190-14	CVFY FCL	R OUTBD ELEVON ACTR CHAN 3 POSN	V58H0954A1	-0,36	1,34	DEG	INHB_MSEQ	6,9,10-10

Table with columns: SEQ, TIME, FUNC, DISC, NOMENCLATURE, FUNCTION, VALUE, INHB, MSEQ, DURATION, LCC, PAGE. Rows include launch sequence items like RUDDER ACTR CHAN 1 POSN, SPEEDBRAKE ACTR CHAN 1 POSN, and SELECTION BODY FLAP FDBK.

DATE	TIME	CD	CLOCK	SEQ	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LC	CC	OMI	ST	SE
12-10-85	:	:	:	:	:	:	:	:	:	:	:	:	:	:	9005	-	L
GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33																	
192-00	VFY	FCL	ENG 1	PITCH	SEC	DELTA	PRESS	SUM1	-350	350	PSID	INHIB	MSEQ	6.9.10-21			
SUM	ENG 1	PITCH	SEC	DELTA	PRESS	A	SUM1	V58P1181A1									
SUM	ENG 1	PITCH	SEC	DELTA	PRESS	B	SUM1	V58P1182A1									
SUM	ENG 1	PITCH	SEC	DELTA	PRESS	C	SUM1	V58P1183A1									
SUM	ENG 1	PITCH	SEC	DELTA	PRESS	D	SUM1	V58P1184A1									
193-00	VFY	FCL	ENG 1	YAW	SEC	DELTA	PRESS	SUM2	-350	350	PSID	INHIB	MSEQ	6.9.10-21			
SUM	ENG 1	YAW	SEC	DELTA	PRESS	A	SUM2	V58P1186A1									
SUM	ENG 1	YAW	SEC	DELTA	PRESS	B	SUM2	V58P1187A1									
SUM	ENG 1	YAW	SEC	DELTA	PRESS	C	SUM2	V58P1188A1									
SUM	ENG 1	YAW	SEC	DELTA	PRESS	D	SUM2	V58P1189A1									
194-00	VFY	FCL	ENG 2	PITCH	SEC	DELTA	PRESS	SUM3	-350	350	PSID	INHIB	MSEQ	6.9.10-21			
SUM	ENG 2	PITCH	SEC	DELTA	PRESS	A	SUM3	V58P1281A1									
SUM	ENG 2	PITCH	SEC	DELTA	PRESS	B	SUM3	V58P1282A1									
SUM	ENG 2	PITCH	SEC	DELTA	PRESS	C	SUM3	V58P1283A1									
SUM	ENG 2	PITCH	SEC	DELTA	PRESS	D	SUM3	V58P1284A1									
195-00	VFY	FCL	ENG 2	YAW	SEC	DELTA	PRESS	SUM4	-350	350	PSID	INHIB	MSEQ	6.9.10-21			
SUM	ENG 2	YAW	SEC	DELTA	PRESS	A	SUM4	V58P1286A1									
SUM	ENG 2	YAW	SEC	DELTA	PRESS	B	SUM4	V58P1287A1									
SUM	ENG 2	YAW	SEC	DELTA	PRESS	C	SUM4	V58P1288A1									
SUM	ENG 2	YAW	SEC	DELTA	PRESS	D	SUM4	V58P1289A1									
196-00	VFY	FCL	ENG 3	PITCH	SEC	DELTA	PRESS	SUM5	-350	350	PSID	INHIB	MSEQ	6.9.10-21			
SUM	ENG 3	PITCH	SEC	DELTA	PRESS	A	SUM5	V58P1381A1									
SUM	ENG 3	PITCH	SEC	DELTA	PRESS	B	SUM5	V58P1382A1									
SUM	ENG 3	PITCH	SEC	DELTA	PRESS	C	SUM5	V58P1383A1									
SUM	ENG 3	PITCH	SEC	DELTA	PRESS	D	SUM5	V58P1384A1									
197-00	VFY	FCL	ENG 3	YAW	SEC	DELTA	PRESS	SUM6	-350	350	PSID	INHIB	MSEQ	6.9.10-21			
SUM	ENG 3	YAW	SEC	DELTA	PRESS	A	SUM6	V58P1386A1									
SUM	ENG 3	YAW	SEC	DELTA	PRESS	B	SUM6	V58P1387A1									
SUM	ENG 3	YAW	SEC	DELTA	PRESS	C	SUM6	V58P1388A1									
SUM	ENG 3	YAW	SEC	DELTA	PRESS	D	SUM6	V58P1389A1									





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: DATE 1 85 : GROUND LAUNCH SEQUENCE DESCRIP : DOCUMENT - LCD STS 33 : OMI S9005 :
: : : : : : : : : : : : : : : : : :
: SEQ : TIME : I : FUNC : DISC : : : : : : : : : : : : : : : : : :
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198-00 -02:55

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199-00 *****
LABL INTG ET LOX PREPRESS MILESTONE MLOX
*****
$ NOTICE: THIS MILESTONE DOES NOT HOLD FOR
DOWNSTREAM HOLD INDICATIONS $

```

```

199-01 VFY INTG RSS MANUAL HOLD ON INHB MLOX
199-02 VFY INTG NTD MANUAL HOLD ON INHB MLOX
199-03 VFY INTG GLS MANUAL HOLD ON INHB MLOX
199-04 VFY INTG GLS-GO FOR ET LOX PRE-PRESSURIZI MLOX ON HOLD
$ GLS EVENT COMPLETE = 174 $

```

```

199-05 K CMD CINTG CCE START CU CCLS TERMINAL SEQ - PRI GCNK3121E ON
199-06 K CMD CINTG CCE START CU CCLS TERMINAL SEQ - SEC GCNK3621E ON
$ DEADFACE/TURN-OFF CENTAUR LO2 VENT HEATERS $
199-07 K CMD CMPS CCE GOX VENT HTR CNTL ENABLE - PRI GCNK4011E OFF
199-08 K CMD CMPS CCE GOX VENT HTR DC MOD ON - PRI GCNK6031E OFF
199-09 K CMD CMPS CCE GOX VENT HTR DC MOD OFF - PRI GCNK6030E ON
199-10 K CMD CMPS CCE GOX VENT HTR CNTL ENABLE - SEC GCNK4511E OFF
199-11 K CMD CMPS CCE GOX VENT HTR DC MOD ON - SEC GCNK6531E OFF
199-12 K CMD CMPS CCE GOX VENT HTR DC MOD OFF - SEC GCNK6530E ON

```

```

199-13 COM LO2 GO FOR ET LOX PRE-PRESSURIZATION NO05INTGR LO2
199-14 MSG INTG -01:57 GO FOR ET LH2 REPLN TERM
199-15 MSG ET LOX PRESS'G START
$ GLS EVENT COMPLETE = 173 $

```

```

200-00 $ TERM ENG GN2 PURGE SUPPLY $
200-01 CMD SSME MPENG GN2 PRG CNT VLV CLD CMD GGNK1030E ON
200-02 CMD SSME MPENG GN2 PRG CNT VLV CLD CRD(R) GGNK1130E ON
200-03 CMD SSME MPENG GN2 PRG CNT VLV CLD CMD OV GGNK1037E OFF
200-04 CMD SSME MPENG GN2 PRG CNT CLD CMD OVR(R) GGNK1137E OFF
CMD SSME MPENG GN2 PRG VNT OPN CMD GGNK1050E ON

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DATE	TIME	SEQ	CD	CLOCK	TIME	FUNCTION	DESCRIPTION	VALUE	ELSE	DURATION	UNIT	PL
12-10-85							GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33					OMI S90C5 - L
200-05		CMD	SSME			MPENG GN2 PRG VNT OPN CMD	GGNK1140E ON					
200-06		CMD	SSME			MPENG GN2 PRG VNT OPN CMD OVR	GGNK1057E OFF					
200-07		CMD	SSME			MPENG GN2 PRG VNT OPN CMD OVR(R)	GGNK1147E OFF					
201-00	-02:50						\$ GLS EVENT COMPLETE = 172 \$					
202-00		CMD	GOX			START GOO2 VENT ARM RETRACT	P004					
203-00	-02:35						\$ GLS EVENT COMPLETE = 170 \$					
204-00		VFY	LO2			ET LOX PRESSURIZING STATUS \$	N0JIS009E ON					PL
205-00		CMD	FCP			PRSD O2 GAS SUPPLY VLV - CLOSE	V45K1196NL ON					
205-01		CMD	FCP			PRSD H2 GAS SUPPLY VLV - CLOSE	V45K2196NL ON					
206-00	-02:30						\$ GLS EVENT COMPLETE = 154 \$					
207-00		VFY	FCP			PRSD O2 GAS SPLY VLV - CLOSED	V45X1195E1 ON					INHB MSEQ
207-01		VFY	FCP			PRSD H2 GAS SPLY VLV - CLOSED	V45X2195E1 ON					INHB MSEQ
208-00		VFY	FCL			BODY FLAP ENABLE 1 OUTPUT	V79X3201E1 OFF					INHB MSEQ
208-01		VFY	FCL			BODY FLAP UP 1 OUTPUT	V79X3202E1 OFF					INHB MSEQ
208-02		VFY	FCL			BODY FLAP DOWN 1 OUTPUT	V79X3203E1 OFF					INHB MSEQ
208-03		VFY	FCL			BODY FLAP ENABLE 2 OUTPUT	V79X3204E1 OFF					INHB MSEQ
208-04		VFY	FCL			BODY FLAP UP 2 OUTPUT	V79X3205E1 OFF					INHB MSEQ
208-05		VFY	FCL			BODY FLAP DOWN 2 OUTPUT	V79X3206E1 OFF					INHB MSEQ
208-06		VFY	FCL			BODY FLAP ENABLE 3 OUTPUT	V79X3207E1 OFF					INHB MSEQ
208-07		VFY	FCL			BODY FLAP UP 3 OUTPUT	V79X3208E1 OFF					INHB MSEQ
208-08		VFY	FCL			BODY FLAP DOWN 3 OUTPUT	V79X3209E1 OFF					INHB MSEQ





DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S9005 - L

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SEQ : TIME : I : FUNC : DISC : NOMENCLATURE : FUNCTION : VALUE : ELSE : DURATION : LCC : : S :  
      : CD : T : : : : : : : : : : : : : : : : S :  
      : CLOCK : E : : : : : : : : : : : : : : : : F :  
      : D :

214-02 CVFY LH2 ET LO2 ULLAGE PRESSURE NO.3 141P1752C1 19.3 22.5 PSIG CPER 6011 IIL MENG 5.1-8

215-00 -01:57

216-00 VFY LH2 LH2 FLIGHT MASS N03IS007E ON INHB MLH2 PL

217-00 \*\*\*\*\*  
 LABL INIG ET LH2 PREPRESS MILESTONE MLH2  
 \*\*\*\*\*

\$ NOTICE: THIS MILESTONE DOES NOT HOLD FOR DOWNSTREAM HOLD INDICATIONS \$

VFY INIG RSS MANUAL HOLD ON INHB MLH2  
 VFY INIG NTD MANUAL HOLD ON INHB MLH2  
 VFY INIG GLS MANUAL HOLD ON INHB MLH2

217-04 VFY INIG GLS-GO FOR LH2 REPLENISH TERMINA MLH2 ON HOLD  
 217-05 MSG INIG GO FOR RS AUTO SEQ START  
 217-06 MSG INIG ET LH2 PRESS'G START

\$ GLS EVENT COMPLETE = 116 \$

218-00 K CMD CINTG CCE T-1/57 AND COUNTING - PRI GCNK3131E ON  
 218-01 K CMD CINTG CCE T-1/57 AND COUNTING - SEC GCNK3631E ON  
 218-02 COM LH2 GO FOR LH2 REPLENISH TERM N004INTGR LH2

\$ GLS EVENT COMPLETE = 115 \$

\$ PROPELLANT S/W ISSUE LH2 TOPPING VLV OP CMD OFF <V41K1411XL> \$

219-00 -01:52

220-00 VFY LH2 LH2 REPL TERM IN PROGRESS N03IS006E ON INHB MSEQ PL

\$ MONITOR ENG LOX INLET TEMPS \$



DATE	TIME	SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LC	CC	S
:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
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225-15	VFY	MPS			LH2	TOPPING VALVE OP	PWR	V41X1458E1	OFF	OR		6.2.1-10		
225-16	VFY	MPS			LH2	TOPPING VALVE	CLOSED	V41X1456X1	ON	INHB	MSEQ	6.2.1-10		
225-17	VFY	MPS			LH2	FEEDLINE RELIEF	SOV OPEN	V41X1441E1	OFF	2 OF 2		6.2.1-13		
225-18	VFY	MPS			LH2	FEEDLINE RELIEF	SOV CL PWR	V41X1449E1	ON	OR		6.2.1-13		
225-19	VFY	MPS			LH2	FEEDLINE RELIEF	SOV CLOSED	V41X1442E1	ON	INHB	MSEQ	6.2.1-13		
225-20	VFY	MPS			LH2	RTLS OTBD	D/V OPEN	V41X1917E1	OFF	2 OF 2		6.2.1-14		
225-21	VFY	MPS			LH2	RTLS OTBD	D/V OP PWR	V41X1911E1	OFF	OR		6.2.1-14		
225-22	VFY	MPS			LH2	RTLS OTBD	D/V CLOSED	V41X1919X1	ON	INHB	MSEQ	6.2.1-14		
225-23	VFY	MPS			LH2	RTLS INBD	D/V OPEN	V41X1927E1	OFF	2 OF 2		6.2.1-14		
225-24	VFY	MPS			LH2	RTLS INBD	D/V OP PWR	V41X1921E1	OFF	OR		6.2.1-14		
225-25	VFY	MPS			LH2	RTLS INBD	D/V CLOSED	V41X1929X1	ON	INHB	MSEQ	6.2.1-14		
225-26	VFY	MPS			L02	FEEDLINE RELIEF	SOV OPEN	V41X1541E1	OFF	2 OF 2		6.2.1-13		
225-27	VFY	MPS			L02	FEEDLINE RELIEF	SOV CL PWR	V41X1549E1	ON	OR		6.2.1-13		
225-28	VFY	MPS			L02	FEEDLINE RELIEF	SOV CLOSED	V41X1542E1	ON	INHB	MSEQ	6.2.1-13		
225-29	VFY	MPS			L02	INBD FILL VALVE	OPEN	V41X1510E1	OFF	3 OF 3		6.2.1-8		
225-30	VFY	MPS			L02	INBD FILL VALVE	OP PWR	V41X1506E1	OFF	3 OF 3		6.2.1-8		
225-31	VFY	MPS			L02	INBD FILL VALVE	CL PWR	V41X1505E1	ON	OR		6.2.1-8		
225-32	VFY	MPS			L02	INBD FILL VALVE	CLOSED	V41X1509X1	ON	INHB	MSEQ	6.2.1-8		
225-33	VFY	MPS			LH2	FEED DISCONNECT	TEMP	V41I1428A1	NOL0	1 OF 2		6.2.1-11		
225-34	VFY	MPS			HI	PT BLEED	TEMP	GLHT4119A	NOL0	INHB	MSEQ	6.2.1-11		
<p>\$ ARM SOUND SUP POWER BUS \$</p> <p>226-00 K CMD WATR PTCR VO/LPS CMD BUS ON CMD GWDKPT08E ON</p> <p>226-01 K CMD WAIR PTCR VO/LPS CMD BUS ON CMD GWDKPT10E ON</p> <p>\$ GLS EVENT COMPLETE = 56 \$</p>														
<p>227-00 -55.00</p> <p>\$ GLS EVENT COMPLETE = 55 \$</p> <p>\$ ARM H2 BURN PICS \$</p> <p>228-00 CMD EPDC H2-BURN SYS A ARM GMSK5012E ON</p> <p>228-01 CMD EPDC H2-BURN SYS B ARM GMSK6012E ON</p> <p>\$ GLS EVENT COMPLETE = 54 \$</p>														
<p>229-00 CMD INTG EX DO BITE TEST 4 VIA PROM SEQ LL1</p> <p>\$ SRB FWD MDM PRELOCK STATUS \$</p> <p>\$ BIT 11 IGN A F2 TEST PWR ON \$</p>														





SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
85									

229-01 VFY INTG DO 0 CHAN 0 LL1 OFF INHB MSEQ 2.4-9  
 \$ BIT 05 LH RECOVERY SYSTEM RESET CMD\$  
 \$ BIT 11 IGN B F2 TEST PWR ON\$

229-02 VFY INTG DO 4 CHAN 0 LL1 OFF INHB MSEQ 2.7-8  
 2.4-9

229-03 CMD INTG READ LL1 BITE STATUS REGISTER LL1  
 VFY INTG BITE STATUS REGISTER INTNAME X0000  
 229-04 CMD INTG EX DO BITE TEST 4 VIA PROM SEQ LR1 INHB MSEQ 2.3-10

229-05 \$ BIT 11 IGN A F2 TEST PWR ON\$  
 229-06 VFY INTG DO 0 CHAN 0 LR1 OFF INHB MSEQ 2.4-9  
 \$ BIT 05 RH RECOVERY SYSTEM RESET CMD\$  
 \$ BIT 11 IGN B F2 TEST PWR ON\$

229-07 VFY INTG DO 4 CHAN 0 LR1 OFF INHB MSEQ 2.7-8  
 2.4-9

229-08 CMD INTG READ LR1 BITE STATUS REGISTER LR1  
 229-09 VFY INTG BITE STATUS REGISTER INTNAME X0000 INHB MSEQ 2.3-10

230-00 -50.00

231-00 \$ VERIFY H2 BURN PIC VOLTS \$  
 231-01 CVFY EPDC H2 BURN SYS A ENG 1 CAP GMSV5311A 35.7 NOHI V 1 OF 2 3.1-11  
 231-02 CVFY EPDC H2 BURN SYS B ENG 1 CAP GMSV6311A 35.7 NOHI V INHB MSEQ 3.1-11  
 231-03 CVFY EPDC H2 BURN SYS A ENG 2 CAP GMSV5309A 35.7 NOHI V 1 OF 2 3.1-11  
 231-04 CVFY EPDC H2 BURN SYS B ENG 2 CAP GMSV6309A 35.7 NOHI V INHB MSEQ 3.1-11  
 231-05 CVFY EPDC H2 BURN SYS A ENG 3 CAP GMSV5310A 35.7 NOHI V 1 OF 2 3.1-11  
 231-06 CVFY EPDC H2 BURN SYS B ENG 3 CAP GMSV6310A 35.7 NOHI V INHB MSEQ 3.1-11

231-06 \$ CENTAUR RBUS PIC CAP VOLTS - CHARGED \$  
 K CVFY CEPDC RBUS SYSA PIC CAP VOLTS GMSV503A 35.7 NOHI V 1 OF 2  
 231-07 K CVFY CEPDC RBUS SYSA PIC CAP VOLTS GMSV7503A 35.7 NOHI V INHB MSRB  
 231-08 K CVFY CEPDC RBUS SYSB PIC CAP VOLTS GMSV6503A 35.7 NOHI V 1 OF 2  
 231-09 K CVFY CEPDC RBUS SYSB PIC CAP VOLTS GMSV8503A 35.7 NOHI V INHB MSRB

232-00 K VFY WATR SS VO LCC BUS ARM IND  
 232-01 K VFY WATR SS VO LCC BUS ARM IND GWDXP12E ON 1 OF 2 3.1-20  
 GWDXP109E ON INHB MSEQ 3.1-20

232-50 V CMD WATR SSM PRI MAIN VLVS CLOSE CMD XWDKVB20E OFF  
 232-51 V CMD WATR SSM SEC MAIN VLVS CLOSE CMD XWDKVF60E OFF



SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
:	CD	T	:	:	:	:	:	:	:
:	CLOCK	E	:	DESIGNATOR	SINGL	:	:	:	PAGE
:	:	:	:	:	OR LO	HIGH	UNIT	:	:
237-00		CMD	BINS	LH FDM AUTO CAL CMD					
237-01		CMD	BINS	RH FDM AUTO CAL CMD					
238-00									
238-50	V	VFY	WATR	SSW PRI MAIN V OPEN ENABLE IND	XWDXVC03E	ON	1 OF 2		
238-51	V	VFY	WATR	SSW SEC MAIN V OPEN ENABLE IND	XWDXVC13E	ON	INHIB MSEQ		
238-52	V	CMD	WATR	ATWD ARM AREA A	XWDKVD71E	ON			
238-53	V	CMD	WATR	ATWD ARM AREA B	XWDKVD51E	ON			

239-00 V CMD BINS LH FDM AUTO CAL CMD B78K5002XL ON

239-01 V CMD BINS RH FDM AUTO CAL CMD B78K6002XL OFF

240-00 \$ ENGINE READY CHECK \$

240-01 CVFY SSME ME-1 OPERATING MODE E41J1513B1 B110 INHB MSEQ 6.2.2-2

240-02 CVFY SSME ME-2 OPERATING MODE E41J2513B1 B110 INHB MSEQ 6.2.2-2

240-02 CVFY SSME ME-3 OPERATING MODE E41J3513B1 B110 INHB MSEQ 6.2.2-2

\$ GLS EVENT COMPLETE = 39 \$

\$ TERM ET HEATERS \$

241-00	K	CMD	EPDC	ET BIPOD HTR AC-1 ON CMD	G56K0015E	OFF			
241-01	K	CMD	EPDC	ET BIPOD HTR AC-2 ON CMD	G56K0025E	OFF			
241-02	K	CMD	EPDC	ET R BIPOD HTR PWR ON CMD	G56K0135E	OFF			
241-03	K	CMD	EPDC	ET L BIPOD HTR PWR ON CMD	G56K0145E	OFF			
241-04	V	CMD	EPDC	ET BIPOD HTR PWR OFF CMD	G56K0010E	ON			
241-05	V	CMD	EPDC	ET L BIPOD TEMP CONT OFF CMD	G56K0050E	ON			
241-06	V	CMD	EPDC	ET R BIPOD TEMP CONT OFF CMD	G56K0060E	ON			
241-07	V	CMD	EPDC	ET B/U BIPOD TEMP CONT OFF CMD	G56K0070E	ON			
241-08	CMD	EPDC	ET AFT HTR AC PWR OFF CMD	G56K0030E	ON				
241-09	CMD	EPDC	LH2 FDLN INBD HTR AC PWR ON CMD	G56K0210E	OFF				
241-10	CMD	EPDC	LH2 FDLN OTBD HTR AC PWR ON CMD	G56K0230E	OFF				
241-11	CMD	EPDC	L02 EB INBD BKT HTR AC PWR ON C	G56K0250E	OFF				
241-12	CMD	EPDC	L02 FDLN BKT HTR AC PWR ON CMD	G56K0270E	OFF				



DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S9CC5 - L :

SEQ : TIME : I : FUNC : DISC : NOMENCLATURE : FUNCTION : VALUE : ELSE : DURATION : LCC : S :  
CD : T : : : : : : : : : : : : : : : S :  
CLOCK : E : : : : : : : : : : : : : : : F :  
: D :  
CMD EPDC LO2 EB OIBD BKT HIR AC PWR ON C 656K0290E OFF

\$ GLS EVENT COMPLETE = 38 \$

\$/\$/\$/\$/\$/\$/\$/\$/ T-38 SEC VENT DOORS 4/7 CMD OPEN (R/S) // // // // // \$

\$ PROPELLANTS PREPRESS CHECK \$

242-00 VFY LH2 LH2 PREPRESS CYCLE FAIL N03IS082E OFF INHB MSEQ 5.1-6

\$ INHIBIT HPU TURBINE SPEED CONTROL LOGIC \$

243-00 ICL BHYD LH RATE APU A TURBINE SPEED SNSR 2 B46R1408C1 00.0 00.0 KRPM  
243-01 ICL BHYD LH RATE APU B TURBINE SPEED SNSR 2 B46R1409C1 00.0 00.0 KRPM  
243-02 ICL BHYD RH RATE APU A TURBINE SPEED SNSR 2 B46R2408C1 00.0 00.0 KRPM  
243-03 ICL BHYD RH RATE APU B TURBINE SPEED SNSR 2 B46R2409C1 00.0 00.0 KRPM

\$ FWD MDM LOCKOUT COMMANDS \$

244-00 CMD INTG LOCK SRB MDM LL1/LR1 CRITICAL LL1/LR1 ON  
244-01 VFY INTG SRB MDM LOCKED LL1/LR1 X0000 INHB MSEQ 2.3-12

\$/\$/\$/\$/\$/\$/\$/\$/ T-33 SEC VENT DOOR 3 CMD OPEN (R/S) // // // // // \$

\$ GLS EVENT COMPLETE = 36 \$

\$ \* \* \* VERIFICATION OF GOX ARM RETRACT \* \* \* \$

245-00 K VFY GOX 6308A103 RETRACT SWITCH NO.1 GSAX8222E ON 1 OF 3 3.1-17  
245-01 K VFY GOX 6308A102 RETRACT SWITCH NO.2 GSAX8222E ON 1 OF 3 3.1-17  
245-02 K VFY GOX A133566 ARM POSITION INDICATION GSAH8191A N0LO 2 DEG INHB MSEQ 3.1-17  
245-50 V VFY GOX 6308A103 RETRACT SW NO 1 GSAX8222E ON 1 OF 6  
245-51 V VFY GOX 6308A102 RETRACT SW NO 2 GSAX8222E ON 1 OF 6  
245-52 V VFY GOX A151111 ARM POS IND GSAH8191A N0LO 2 DEG 1 OF 6  
245-53 V VFY GOX 6308A103 RETRACT SW NO 1 GSAX8222E ON 1 OF 6  
245-54 V VFY GOX 6308A102 RETRACT SW NO 2 GSAX8222E ON 1 OF 6  
245-55 V VFY GOX A151111 ARM POS IND GSAH8196A N0LO 2 DEG INHB MSEQ

\$ SRB RATE GYRO HEALTH CHECK \$

246-00 VFY GNS LH EVENT RATE GYRO A PITCH SMRD B79X1844X1 ON INHB MSEQ 2.3-6

\$/\$/\$/\$/\$/\$/\$/\$/ T-38 SEC VENT DOORS 4/7 CMD OPEN (R/S) // // // // // \$

SEQ	TIME	FUNCTION	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
:	CD	:	:	:	:	:	:	:	:
:	CLOCK	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:
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:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:

246-01	VFY	GNS	LH	EVENT	RATE	GYRO B	PITCH	SMRD	B79X1845X1	ON	INHB	MSEQ	2.3-6
246-02	VFY	GNS	LH	EVENT	RATE	GYRO C	PITCH	SMRD	B79X1846X1	ON	INHB	MSEQ	2.3-6
246-03	VFY	GNS	LH	EVENT	RATE	GYRO A	YAW	SMRD	B79X1847X1	ON	INHB	MSEQ	2.3-6
246-04	VFY	GNS	LH	EVENT	RATE	GYRO B	YAW	SMKD	B79X1848X1	ON	INHB	MSEQ	2.3-6
246-05	VFY	GNS	LH	EVENT	RATE	GYRO C	YAW	SMRD	B79X1849X1	ON	INHB	MSEQ	2.3-6
246-06	VFY	GNS	RH	EVENT	RATE	GYRO A	PITCH	SMRD	B79X2844X1	ON	INHB	MSEQ	2.3-6
246-07	VFY	GNS	RH	EVENT	RATE	GYRO B	PITCH	SMRD	B79X2845X1	ON	INHB	MSEQ	2.3-6
246-08	VFY	GNS	RH	EVENT	RATE	GYRO C	PITCH	SMRD	B79X2846X1	ON	INHB	MSEQ	2.3-6
246-09	VFY	GNS	RH	EVENT	RATE	GYRO A	YAW	SMRD	B79X2847X1	ON	INHB	MSEQ	2.3-6
246-10	VFY	GNS	RH	EVENT	RATE	GYRO B	YAW	SMRD	B79X2848X1	ON	INHB	MSEQ	2.3-6
246-11	VFY	GNS	RH	EVENT	RATE	GYRO C	YAW	SMRD	B79X2849X1	ON	INHB	MSEQ	2.3-6

247-00														
247-01	CVFY	BHYD	LH	HYD	FLUID	RSVR	LEVEL	SYS A	B58Q1350C1	50	NOHI	PCT	2.1-9	
247-02	CVFY	BHYD	RH	HYD	FLUID	RSVR	LEVEL	SYS B	B58Q1351C1	50	NOHI	PCT	2.1-9	
247-03	CVFY	BHYD	RH	HYD	FLUID	RSVR	LEVEL	SYS A	B58Q2350C1	50	NOHI	PCT	2.1-9	
247-04	CVFY	BHYD	RH	HYD	FLUID	RSVR	LEVEL	SYS B	B58Q2351C1	50	NOHI	PCT	2.1-9	
247-05	CVFY	BHYD	LH	N2H4	BTL	GN2	PRESS	SYS A	B46P1305C1	300	NOHI	PSIA	2.1-5	
247-06	CVFY	BHYD	LH	N2H4	BTL	GN2	PRESS	SYS B	B46P1306C1	300	NOHI	PSIA	2.1-5	
247-07	CVFY	BHYD	RH	N2H4	BTL	GN2	PRESS	SYS A	B46P2305C1	300	NOHI	PSIA	2.1-5	
247-08	CVFY	BHYD	RH	N2H4	BTL	GN2	PRESS	SYS B	B46P2306C1	300	NOHI	PSIA	2.1-5	
247-09														
247-10														
247-11														

248-00	ICL	FCP	PRSD	FCP 1	O2	REAC	VLV	-	OPEN	V45X1150E1	OFF		
248-01	ICL	FCP	PRSD	FCP 1	H2	REAC	VLV	-	OPEN	V45X2150E1	OFF		
248-02	ICL	FCP	PRSD	FCP 2	O2	REAC	VLV	-	OPEN	V45X1155E1	OFF		
248-03	ICL	FCP	PRSD	FCP 2	H2	REAC	VLV	-	OPEN	V45X2155E1	OFF		
248-04	ICL	FCP	PRSD	FCP 3	O2	REAC	VLV	-	OPEN	V45X1160E1	OFF		
248-05	ICL	FCP	PRSD	FCP 3	H2	REAC	VLV	-	OPEN	V45X2160E1	OFF		

249-00	VFY	MPS	MPS	L02	OTBD	FILL	VLV	OPEN	V41X1513E1	OFF	3	OF	3	6.2.1-9	
249-01	VFY	MPS	MPS	L0X	OTBD	FILL	VLV	CLOSE	PWR	V41X1507E1	ON	3	OF	3	6.2.1-9
249-02	VFY	MPS	MPS	L0X	OTBD	FILL	VLV	OPEN	PWR 0	V41X1508E1	OFF	OR		6.2.1-9	
249-03	VFY	MPS	MPS	L02	OTBD	FILL	VLV	CLOSED	V41X1514X1	ON	INHB	MSEQ	6.2.1-9		
249-20	VFY	MPS	MPS	LH2	OUTBD	FILL	VLV	OPEN	V41X1388E1	OFF	3	OF	3	6.2.1-7	

DATE	TIME	SEQ	CD	CLOCK	TIME	INTG	WATR	SSW	PRI	GN2	VLV	CLOSING	PRESS	WMDPVF44A	N0L0	50	PSIG	1 OF 2	INHB	MSEQ	3 OF 3	6.2.1-7	6.2.1-7	6.2.1-7		
12-10-85																										
GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33																										
OMI S9005 - L																										
SEQ	TIME	INTG	WATR	SSW	PRI	GN2	VLV	CLOSING	PRESS	WMDPVF44A	N0L0	50	PSIG	1 OF 2	INHB	MSEQ	3 OF 3	6.2.1-7	6.2.1-7	6.2.1-7	6.2.1-7	6.2.1-7	6.2.1-7	6.2.1-7	6.2.1-7	
FUNCTION	DISC	DISC	DISC	DISC	DISC	DISC	DISC	DISC	DISC	DISC	DISC	DISC	DISC	DISC	DISC	DISC	DISC	DISC	DISC	DISC	DISC	DISC	DISC	DISC	DISC	
DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	
249-21	VFY	MPS																								
249-22	VFY	MPS																								
249-23	VFY	MPS																								
250-01	V	VFY																								
250-02	V	VFY																								
251-00																										
251-01	K	VFY																								
251-02	K	VFY																								
251-03																										
252-00																										
252-01	VFY	INTG																								
252-02	VFY	INTG																								
252-03	VFY	INTG																								
252-04	VFY	INTG																								
252-05	VFY	INTG																								
252-06	VFY	INTG																								
252-07	CMD	INTG																								
252-08	K	CMD																								
252-09	K	CMD																								
252-10	MMSG	INTG																								
252-11	MSG	INTG																								
252-12	CMD	INTG																								
\$ GLS EVENT COMPLETE = 30 \$																										
* * * * * \$ HOLD NO LONGER AVAILABLE * * * * *																										
253-00	\$ DELETED \$																									
253-01	\$ DELETED \$																									



DATE	TIME	SEQ	CMD	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME
12-10-85																		
GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33																		
OMI S9005 - L																		
DATE	TIME	SEQ	CMD	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME
12-10-85																		
GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33																		
OMI S9005 - L																		
DATE	TIME	SEQ	CMD	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME
12-10-85																		
GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33																		
OMI S9005 - L																		
DATE	TIME	SEQ	CMD	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME
12-10-85																		
GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33																		
OMI S9005 - L																		
259-01	CMD	BHYD	LH HPU SYSTEM B-2 START	B58K3019XL	ON													
259-02	CMD	BHYD	RH HPU SYSTEM A-2 START	B58K4017XL	ON													
259-03	CMD	BHYD	RH HPU SYSTEM B-2 START	B58K4019XL	ON													
\$ GLS EVENT COMPLETE = 27 \$																		
260-00	K CMD	WATR	SS PRE L/O VLVS VENT CMD	GWDKPT36E	ON													
260-01	K CMD	WATR	SS PRE L/O VLVS VENT CMD	GWDKPT22E	ON													
261-00																		
\$ ACTIVATE HPU TURBINE SPEED CONTROL LOGIC \$																		
\$ CONTROL LOGIC EXECUTION CAUSES HPU SHUTDOWN \$																		
262-00	ACL	BHYD	LH APU A TURBINE SPEED 2	B46R1408C1	10.0	87.4												2.1-12
262-01	ACL	BHYD	LH APU B TURBINE SPEED 2	B46R1409C1	10.0	87.4												2.1-12
262-02	ACL	BHYD	RH APU A TURBINE SPEED 2	B46R2408C1	10.0	87.4												2.1-12
262-03	ACL	BHYD	RH APU B TURBINE SPEED 2	B46R2409C1	10.0	87.4												2.1-12
263-00																		
\$ SRB HYD PRESS TO SYSTEM \$																		
264-00	CMD	BHYD	LH HYD PUMP A BYPASS VLV OPEN	B58K3020XL	OFF													
264-01	CMD	BHYD	LH HYD PUMP B BYPASS VLV OPEN	B58K3021XL	OFF													
264-02	CMD	BHYD	RH HYD PUMP A BYPASS VLV OPEN	B58K4020XL	OFF													
264-03	CMD	BHYD	RH HYD PUMP B BYPASS VLV OPEN	B58K4021XL	OFF													
\$ GLS EVENT COMPLETE = 22 \$																		
265-00	CVFY INTG	LAUNCH SEQUENCE ABORT FLAG	V9DX8382X1	OFF														
266-00																		
\$ START GIMBAL PROFILE \$																		

: SEQ : TIME : I : FUNC:DISC : NOMENCLATURE : FUNCTION : VALUE : ELSE : DURATION : LCC : S :  
 : : CD : T : : : : : : : : : : : : : : : : : : S :  
 : : CLOCK : E : : : : : : : : : : : : : : : : : : S :  
 : F :  
 : D :

267-00 CMD BHYD SRB FCS/HYD VERIF FLAG P0G3 ON  
 267-01 CMD BHYD SRB GIMBAL PROFILE EVAL P0O3 ON

2.1-15

\$ GLS EVENT COMPLETE = 20 \$

\$ ACTIVATE NOZZLE LIMIT CONTROL LOGIC \$

\$ CONTROL LOGIC EXECUTION CAUSES HPU SHUTDOWN \$

268-00 ACL BHYD LH POSITION TVC ROCK ACTUATOR B58H1150C1 +1.88 -1.88 IN  
 268-01 ACL BHYD LH POSITION TVC TILT ACTUATOR B58H1151C1 +1.88 -1.88 IN  
 268-02 ACL BHYD RH POSITION TVC ROCK ACTUATOR B58H2150C1 +1.88 -1.88 IN  
 268-03 ACL BHYD RH POSITION TVC TILT ACTUATOR B58H2151C1 +1.88 -1.88 IN

269-00 CVFY BHYD LH APU A TURBINE SPEED 2 B46R1408C1 55.0 NOHI KRPM EXIT  
 269-01 CVFY BHYD LH APU B TURBINE SPEED 2 B46R1409C1 55.0 NOHI KRPM EXIT  
 269-02 CVFY BHYD RH APU A TURBINE SPEED 2 B46R2408C1 55.0 NOHI KRPM EXIT  
 269-03 CVFY BHYD RH APU B TURBINE SPEED 2 B46R2409C1 55.0 NOHI KRPM EXIT  
 269-50 -20.00

\$ ENABLE OPEN COMMANDS FOR ATWD \$

270-00 V CMD WATR ATWD ET ARM OPEN CMD XWDKVD61E ON  
 270-01 V CMD WATR LH2 AREA WASHDN INITIATE CMD XWDKV061E ON  
 270-02 V CMD WATR L02 AREA WASHDN INITIATE CMD XWDKV071E ON

\$/\$/\$/\$/\$/ T-18 SEC VENT DOORS 1/2 CMD OPEN (R/S) // // // // //

271-00 -16.00

271-01 K CMD WATR SS PRE L/O VLVS OPEN CMD GWDKPT30E ON  
 271-02 K CMD WATR SS PRE L/O VLVS OPEN CMD GWDKPT32E ON  
 271-50 V CMD WATR SSW PRI MAIN VLVS OPEN CMD XWDKVB21E ON  
 271-51 V CMD WATR SSW SEC MAIN VLVS OPEN CMD XWDKVC21E ON

272-00 MSG INTG SOUND SUPPRESSION WATER ON

273-00 K CMD WATR SS POST L/O VLVS VENT CMD GWDKPT38E ON



SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
277-09	CVFY	EPDC	SYS A	LH	HDP M5 PIC CAP VOLT RED	GMSV3305A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
277-10	CVFY	EPDC	SYS A	LH	SRB HDP M6 PIC CAP VOLT	GMSV1306A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
277-11	CVFY	EPDC	SYS A	LH	HDP M6 PIC CAP VOLT RED	GMSV3306A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
277-12	CVFY	EPDC	SYS A	LH	SRB HDP M7 PIC CAP VOLT	GMSV1307A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
277-13	CVFY	EPDC	SYS A	LH	SRB HDP M7 PIC CAP VOLT RED	GMSV3307A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
277-14	CVFY	EPDC	SYS A	LH	HDP M8 PIC CAP VOLT	GMSV1308A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
277-15	CVFY	EPDC	SYS A	LH	HDP M8 PIC CAP VOLT RED	GMSV3308A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
277-16	CVFY	EPDC	SYS B	RH	SRB HDP M1 PIC CAP VOLT	GMSV2301A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
277-17	CVFY	EPDC	SYS B	RH	HDP M1 PIC CAP VOLT RED	GMSV4301A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
277-18	CVFY	EPDC	SYS B	RH	SRB HDP M2 PIC CAP VOLT	GMSV2302A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
277-19	CVFY	EPDC	SYS B	RH	HDP M2 PIC CAP VOLT RED	GMSV4302A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
277-20	CVFY	EPDC	SYS B	RH	SRB HDP M3 PIC CAP VOLT	GMSV2303A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
277-21	CVFY	EPDC	SYS B	RH	HDP M3 PIC CAP VOLT RED	GMSV4303A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
277-22	CVFY	EPDC	SYS B	RH	SRB HDP M4 PIC CAP VOLT	GMSV2304A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
277-23	CVFY	EPDC	SYS B	RH	HDP M4 PIC CAP VOLT RED	GMSV4304A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
277-24	CVFY	EPDC	SYS B	LH	SRB HDP M5 PIC CAP VOLT	GMSV2305A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
277-25	CVFY	EPDC	SYS B	LH	HDP M5 PIC CAP VOLT RED	GMSV4305A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
277-26	CVFY	EPDC	SYS B	LH	SRB HDP M6 PIC CAP VOLT	GMSV2306A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
277-27	CVFY	EPDC	SYS B	LH	HDP M6 PIC CAP VOLT RED	GMSV4306A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
277-28	CVFY	EPDC	SYS B	LH	SRB HDP M7 PIC CAP VOLT	GMSV2307A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
277-29	CVFY	EPDC	SYS B	LH	HDP M7 PIC CAP VOLT RED	GMSV4307A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
277-30	CVFY	EPDC	SYS B	LH	SRB HDP M8 PIC CAP VOLT	GMSV2308A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
277-31	CVFY	EPDC	SYS B	LH	HDP M8 PIC CAP VOLT RED	GMSV4308A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
277-32	CVFY	EPDC	SYS A	ETVAS	PIC CAP RED VOLTS	GMSV1311A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-8
277-33	CVFY	EPDC	SYS A	ETVAS	PIC CAP RED VOLTS	GMSV3311A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-8
277-34	CVFY	EPDC	SYS B	ETVAS	PIC CAP RED VOLTS	GMSV2311A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-8
277-35	CVFY	EPDC	SYS B	ETVAS	PIC CAP RED VOLTS	GMSV4311A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-8
277-36	CVFY	EPDC	SYS A	LH2	TSM PIC CAP VOLTS	GMSV1309A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-7
277-37	CVFY	EPDC	SYS A	LH2	TSM PIC CAP RED VOLTS	GMSV3309A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-7
277-38	CVFY	EPDC	SYS A	L02	TSM PIC CAP VOLTS	GMSV1310A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-7
277-39	CVFY	EPDC	SYS A	L02	TSM PIC CAP RED VOLTS	GMSV3310A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-7
277-40	CVFY	EPDC	SYS B	LH2	TSM PIC CAP VOLTS	GMSV2309A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-7
277-41	CVFY	EPDC	SYS B	LH2	TSM PIC CAP RED VOLTS	GMSV4309A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-7
277-42	CVFY	EPDC	SYS B	L02	TSM PIC CAP VOLTS	GMSV2310A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-7







DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI 9005 - L :

SEQ : TIME : I : FUNC : DISC : Nomenclature : FUNCTION : ELSE : DURATION : LCC : S :  
 : CD : T : : : : : : : : : : : : : S :  
 : CLOCK : E : : : : : : : : : : : : : F :  
 : : : : : : : : : : : : : : : : : D :

286-02 K VFY WAIR SS POSILFIF VENI VLV SV10 OP IND GMDXPI57E ON EXIT 3.1-22

\$ VERIFY OF SS PRE L/O FLOW \$  
 \$ VERIFY 4 OF 5 VALVES HAVE AT LEAST 1 OF 2 ON INDICATIONS ELSE EXIT \$

286-50	V	VFY	WAIR	PRI	MAIN	VLV	1	XWDXVB23E	ON	1 OF 2	
286-51	V	VFY	WAIR	SEC	MAIN	VLV	1	XWDXVC23E	ON	1 OF 2	
286-52	V	VFY	WAIR	PRI	MAIN	VLV	2	XWDXVB33E	ON	1 OF 2	
286-53	V	VFY	WAIR	SEC	MAIN	VLV	2	XWDXVC33E	ON	1 OF 2	
286-54	V	VFY	WAIR	PRI	MAIN	VLV	3	XWDXVB43E	ON	1 OF 2	
286-55	V	VFY	WAIR	SEC	MAIN	VLV	3	XWDXVC43E	ON	1 OF 2	
286-56	V	VFY	WAIR	PRI	MAIN	VLV	4	XWDXVB53E	ON	1 OF 2	
286-57	V	VFY	WAIR	SEC	MAIN	VLV	4	XWDXVC53E	ON	1 OF 2	
286-58	V	VFY	WAIR	PRI	MAIN	VLV	5	XWDXVB63E	ON	1 OF 2	
286-59	V	VFY	WAIR	SEC	MAIN	VLV	5	XWDXVC63E	ON	1 OF 2	

\*\*\*\*\*  
 LABEL INIG GO FOR SSME START \*\*\*\*\*  
 \*\*\*\*\* MESS \*\*\*\*\*  
 \*\*\*\*\*

288-00	VFY	INTG	RSS	MANUAL	HOLD				ON	INHB	MENG
288-01	VFY	INTG	NTD	MANUAL	HOLD				ON	INHB	MENG
288-02	VFY	INTG	GLS	MANUAL	HOLD				ON	INHB	MENG
288-03	VFY	INIG	GLS-GO	FOR	SRB	IGNITION	MSRB		ON	EXIT	
288-04	VFY	INTG	GLS-GO	FOR	SSME	IGNITION			ON	EXIT	

\$ GLS EVENT COMPLETE = 9 \$

\$ CMD HYDROGEN BURNOFF IGNITION START \$

289-00	CMD	EPDC	H2-BURN	SYS	A	FIRE	1	GMSK5013E	ON		
289-01	CMD	EPDC	H2-BURN	SYS	B	FIRE	1	GMSK6013E	ON		
289-02	CMD	EPDC	H2-BURN	SYS	A	FIRE	2	GMSK5014E	ON		
289-03	CMD	EPDC	H2-BURN	SYS	B	FIRE	2	GMSK6014E	ON		

\$ GLS EVENT COMPLETE = 8 \$

\$ GROUND TO VEHICLE GO FOR ENGINE START \$

290-00	CMD	INTG	LPS	GO	FOR	ENG	START		ON		
290-01	MSG	INTG	GLS	GO	FOR	MAIN	ENG	START	CMD	LS	

DATE 12-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S9005 - L

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
:	CD	T	:	:	:	:	:	:	:	:	:
:	CLOCK	E	:	:	:	DESIGNATOR	SINGL	:	:	:	:
:	:	:	:	:	:	OR	LO	HIGH	UNIT	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:

290-02	MMSG	INTG	T-0	GO	FOR	SRB	IGNITION				
290-03	OMSG	INTG	GO	FOR	MAIN	ENGINE	START				
291-00	CMD	DPS			\$ TERM FWD CMD DECODERS \$						
291-01	CMD	DPS	FWD	CMD	DCDR	LF01	PWR	SPLY	1	V72K7968W	OFF
			FWD	CMD	DCDR	LF01	PWR	SPLY	2	V72K7969W	OFF
292-00	CMD	MPS			\$ TURN OFF LH2 RECIRC PUMPS \$						
292-01	CMD	MPS	IT111	LH2	PUMP1	PRI	BUS	CMD		GLHK0173E	OFF
292-02	CMD	MPS	IT112	LH2	PUMP2	PRI	BUS	CMD		GLHK0174E	OFF
292-03	CMD	MPS	IT113	LH2	PUMP3	PRI	BUS	CMD		GLHK0175E	OFF
292-04	CMD	MPS	IT211	LH2	PUMP1	BUS	CMD			GLHK0276E	OFF
292-05	CMD	MPS	IT212	LH2	PUMP2	BUS	CMD			GLHK0277E	OFF
			IT213	LH2	PUMP3	BUS	CMD			GLHK0278E	OFF
293-00	CMD	MPS	LH2	HI	POINT	BLEED	VLV	OPEN	CMDB	V41K1465NL	OFF
293-01	CMD	MPS	LH2	HI	POINT	BLEED	VLV	OPEN	CMDB	V41K1466NL	OFF
293-02	CMD	MPS	LH2	RECIRC	VLVS	OPEN	CMD			V41K1111NL	OFF
294-00	CMD	EPDC	IT110	BUS	ON	CMD				GASK0154E	OFF
294-01	CMD	EPDC	IT210	BUS	ON	CMD				GASK0255E	OFF
295-00	CMD	DPS			\$ TERM AFT CMD DECODERS \$						
295-01	CMD	DPS	AFT	CMD	DCDR	LA01	PWR	SPLY	1	V72K7965W	OFF
			AFT	CMD	DCDR	LA01	PWR	SPLY	2	V72K7966W	OFF
296-00	V	CMD	ARMS	A	REMOTE	POWER	CONTROL			XEGKVP01E	OFF
296-01	V	CMD	ARMS	B	REMOTE	POWER	CONTROL			XEGKVP11E	OFF
296-02	VFY	ECLS	VCU1	SUPPLY	VALVE	OPEN	IND			GFRX1217E	ON
296-03	CMD	ECLS	VCU1	SELECT						N03IS044E	ON
297-00	CMD	ECLS	VCU1	PUMP	TURN	OFF	AND	VLV	SAFING	\$	
297-01	CMD	ECLS	VCU1	PUMP1	STOP	CMD				GFRK1030E	ON
297-02	CMD	ECLS	VCU1	PUMP2	STOP	CMD				GFRK1040E	ON
			VCU1	PUMP3	STOP	CMD				GFRK1050E	ON

DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S9005 - L :

SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
	CD	T			DESIGNATOR	SINGL			PAGE	S
	CLOCK	E				OR LO	HIGH	UNIT		F
										D

298-00	CMD	ECLS	GCU2	PUMP1	STOP	CMD			GFRK2030E	ON
298-01	CMD	ECLS	GCU2	PUMP2	STOP	CMD			GFRK2040E	ON
298-02	CMD	ECLS	GCU2	PUMP3	STOP	CMD			GFRK2050E	ON
299-00	CMD	ECLS	GCU1	SUPPLY	COOLANT	CMD			GFRK1140E	OFF
299-01	CMD	ECLS	GCU2	SUPPLY	COOLANT	CMD			GFRK2140E	OFF
299-02	CMD	ECLS	GCU1	BYP	COOLANT	CMD			GFRK1150E	ON
299-03	CMD	ECLS	GCU2	BYP	COOLANT	CMD			GFRK2150E	ON



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: DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S9005 - L :
: SEQ : TIME : I : FUNC : DISC : NOMENCLATURE : FUNCTION : VALUE : ELSE : DURATION : LCC : PAGE :
: : CD : T : : : : : : : : : : : : : :
: : CLOCK : E : : : : : : : : : : : : : :
: : : : : : : : : : : : : : : : : : : :
: : : : : : : : : : : : : : : : : : : :

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303-01 CMD ECLS GCU2 BYP COOLANT CMD GERK2150E OFF

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$ SRB IGNITION $

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: SEQ : TIME : I : FUNC : DISC : : NOMENCLATURE : : FUNCTION : : ELSE : : DURATION : : LCC : : S :  
 : : CD : T : : : : : : : : : : : : : : : : S :  
 : : CLOCK : E : : : : : : : : : : : : : : : : F :  
 : D :

310-00 ST290 VFY SYSTEM A HDP T-0 BUS ON GMSX1107E ON 2 OF 3  
 310-01 VFY SYSTEM B HDP T-0 BUS ON GMSX2107E ON 2 OF 3  
 310-02 VFY SRB IGN CMD FLG V90X8377X1 ON GT0 ST290  
 310-03 MSG \$ SHUTTLE LIFTOFF \$

\$ STS LIFTOFF SIGNAL TO FR1 CONSOLES \$  
 311-00 COM L02 STS LIFTOFF COMM INTERRUPT N014INTGR L02  
 311-01 COM LH2 STS LIFTOFF COMM INTERRUPT N014INTGR LH2  
 311-02 CMD INTG STS LIFTOFF FLAG N03IS125E ON

\$\*\*\*\*\*\$  
 \$ POST LIFTOFF SAFING \$  
 \$\*\*\*\*\*\$

\$ LATCH ORBITER ACCESS ARM \$  
 312-00 K CMD ARMS OAA LATCHBACK SPLY VLV-LTCH ENAB GSAK7501E ON  
 312-01 K CMD ARMS OAA LATCHBACK SPLY VLV-LTCH ENAB GSAK7506E ON  
 312-02 K CMD ARMS OAA LATCHBACK SPLY VALVE-LATCH GSAK7500E ON  
 312-03 K CMD ARMS OAA LATCHBACK SPLY VALVE-LATCH GSAK7505E ON

\$ LATCH GOX ARM \$  
 313-00 CMD GOX LATCH BACK CMD GSAK8140E ON  
 313-01 CMD GOX LATCH BACK CMD GSAK8145E ON

313-50 V CMD WATR MST WASHDOWN INITIATE CMD XWDKV051E ON  
 313-51 V CMD WATR AT WASHDOWN INITIATE CMD XWDKV041E ON  
 313-52 V CMD WATR CCAA/EGRESS ROUTE OPEN B CMD XWDKVD31E ON  
 313-53 V CMD WATR CCAA VALVES OPEN COMMAND XWDKVA71E ON  
 314-00 K CMD ARMS \$ DELAY 1 SECOND KSC ONLY \$ GSAK7500E OFF  
 314-01 K CMD ARMS OAA LATCHBACK SPLY VLV-LATCH GSAK7505E OFF  
 314-02 K CMD ARMS OAA LATCHBACK SPLY VLV-LTCH ENAB GSAK7501E OFF

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: DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S9005 - L :
:-----:-----:-----:-----:-----:-----:-----:-----:-----:-----:-----:
: SEQ : TIME : I : FUNC : DISC : NOMENCLATURE : FUNCTION : VALUE : ELSE : DURATION : LCC : PAGE :
: : CD : T : : : : : : : : : : : : :
: : CLOCK : E : : : : : : : : : : : : :
: : : : : : : : : : : : : : : : :
314-03 K CMD ARMS OAA LATCHBACK SPLY VLV-LICH ENAB GSAK7506E OFF
$ RESET H2 BURN $
315-00 CMD EPDC H2-BURN SYS A ARM GMSK5012E OFF
315-01 CMD EPDC H2-BURN SYS B ARM GMSK6012E OFF
315-02 CMD EPDC H2-BURN SYS A FIRE 1 GMSK5013E OFF
315-03 CMD EPDC H2-BURN SYS B FIRE 1 GMSK6013E OFF
315-04 CMD EPDC H2-BURN SYS A FIRE 2 GMSK5014E OFF
315-05 CMD EPDC H2-BURN SYS B FIRE 2 GMSK6014E OFF
$ GCU REFRIG UNIT SHUTDOWN AND PUMP RETERMINATE INITIATION $
316-00 $ DELETED $
316-01 $ DELETED $
316-02 $ DELETED $
316-03 CMD ECLS GCU1 REFRIG UNIT STOP CMD GFRK1070E ON
$ GCU2 REFRIG UNIT STOP CMD GFRK2070E ON
317-00 $ DELETED $
317-01 $ DELETED $
317-02 $ DELETED $
317-03 CMD ECLS GCU2 REFRIG UNIT STOP CMD GFRK2070E ON
$ SS SECURING $
318-00 K CMD WATR SS PRE L/O VLVS VENT CMD GWDKPT36E OFF
318-01 K CMD WATR SS PRE L/O VLVS VENT CMD GWDKPT22E OFF
318-02 K CMD WATR SS PRE L/O VLVS OPEN CMD GWDKPT30E OFF
318-03 K CMD WATR SS PRE L/O VLVS OPEN CMD GWDKPT32E OFF
318-04 K CMD WATR SS POST L/O VLVS VENT CMD GWDKPT38E OFF
318-05 K CMD WATR SS POST L/O VLVS VENT CMD GWDKPT24E OFF
318-06 $ MOVED TO SEQ 320-04 $
318-07 $ MOVED TO SEQ 320-05 $
318-08 $ MOVED TO SEQ 320-06 $
318-09 $ MOVED TO SEQ 320-07 $
318-10 $ MOVED TO SEQ 320-08 $
318-11 $ MOVED TO SEQ 320-09 $
318-12 $ MOVED TO SEQ 320-10 $
318-13 $ MOVED TO SEQ 320-11 $
318-14 $ MOVED TO SEQ 320-12 $
318-15 $ MOVED TO SEQ 320-13 $

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: DATE 12 35 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S90C5 - L :
: SEQ : TIME : I : FUNC : DISC : : NOMENCLATURE : : FUNCTION : : VALUE : : DURATION : : LCC : : S :
: : CD : T : : : : : : : : : : : : : : : : : : : : : :
: : CLOCK : E : : : : : : : : : : : : : : : : : : : : : :
: : : : : : : : : : : : : : : : : : : : : : : : : : : :
: : : : : : : : : : : : : : : : : : : : : : : : : : : :
318-16 $ MOVED TO SEQ 320-14 $
318-17 $ MOVED TO SEQ 320-15 $

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```

$ SS SECURING $
$ DELAY 25 SECONDS $
319-00 CMD ECLS GCU1 PUMP1 STOP CMD GFRK1030E OFF
319-01 CMD ECLS GCU1 PUMP2 STOP CMD GFRK1040E OFF
319-02 CMD ECLS GCU1 PUMP3 STOP CMD GFRK1050E OFF
319-03 CMD ECLS GCU1 REFRIG UNIT STOP CMD GFRK1070E OFF
319-20 CMD ECLS GCU2 PUMP1 STOP CMD GFRK2030E OFF
319-21 CMD ECLS GCU2 PUMP2 STOP CMD GFRK2040E OFF
319-22 CMD ECLS GCU2 PUMP3 STOP CMD GFRK2050E OFF
319-23 CMD ECLS GCU2 REFRIG UNIT STOP CMD GFRK2070E OFF

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```

$ SS SECURING $
$ DELAY 18 SECONDS $
320-00 V CMD WATR SSW PRI MAIN VALVE OPEN CMD XWDKVB21E OFF
320-01 V CMD WATR SSW SEC MAIN VALVE OPEN CMD XWDKVC21E OFF
320-02 V CMD WATR SSW PRI MAIN VALVE OPEN ENBLE CMD XWDKVC01E OFF
320-03 V CMD WATR SSW SEC MAIN VALVE OPEN ENBLE CMD XWDKVC11E OFF

```

```

$ SS TRANSFER TO TS $
320-04 K CMD WATR PTCR VO/LPS CMD BUS ON CMD GWDKPT08E ON
320-05 K CMD WATR PTCR VO/LPS CMD BUS ON CMD GWDKPT10E ON
320-06 K CMD WATR TS/VO CONTROL TS-ON/VO-OFF GWDKPT34E ON
320-07 K CMD WATR TS/VO CONTROL TS-ON/VO-OFF GWDKPT35E ON
320-08 K CMD WATR PTCR VO/LPS CMD BUS ON CMD GWDKPT08E OFF
320-09 K CMD WATR PTCR VO/LPS CMD BUS ON CMD GWDKPT10E OFF
320-10 K CMD WATR PTCR VO/LPS CMD BUS OFF GWDKPT09E ON
320-11 K CMD WATR PTCR VO/LPS CMD BUS OFF GWDKPT13E ON
320-12 K CMD WATR TS/VO CONTROL TS-ON/VO-OFF GWDKPT34E OFF
320-13 K CMD WATR TS/VO CONTROL TS-ON/VO-OFF GWDKPT35E OFF
320-14 K CMD WATR PTCR VO/LPS CMD BUS OFF GWDKPT09E OFF

```







SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
321-23		COM	INTG	SYSTEMS IN CONTROL	N012INTGR	INSTR				
321-24		COM	INTG	SYSTEMS IN CONTROL	N012INTGR	EPDC				
321-25		COM	INTG	SYSTEMS IN CONTROL	N012INTGR	PVD				
321-26		COM	INTG	SYSTEMS IN CONTROL	N012INTGR	BPYRO				
321-27		COM	INTG	SYSTEMS IN CONTROL	N012INTGR	BELEC				
321-28		COM	INTG	SYSTEMS IN CONTROL	N012INTGR	TINST				
321-29		COM	INTG	SYSTEMS IN CONTROL	N012INTGR	BINST				
321-30		COM	INTG	SYSTEMS IN CONTROL	N012INTGR	GNC				
321-31		COM	INTG	SYSTEMS IN CONTROL	N012INTGR	DPS				
322-00		\$ * RANGE SAFETY HOLD FD RSYS TRANSFER TO SYSTEM * \$								
322-01		CRSY	BRS	RANGE SAFETY LAUNCH PROCEED	GRSX2100E					
323-00		CMD	INTG	IMU HOLD AVAILABLE TIMER ACTIV.	GCDKTIME	OFF				
323-01		CMD	INTG	APU HOLD AVAILABLE TIMER ACTIV.	GCDKTIME2	OFF				
323-02		CMD	INTG	LOX HOLD AVAILABLE TIMER ACTIV.	GCDKTIME3	OFF				
323-03		CMD	INTG	SPARE CDT TIMER ACTIVATION	GCDKTIME4	OFF				
324-00		END								



```

: DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S9005 - L :
: : : : : : : : : : : : : : : : : :
: S : : : : : : : : : : : : : : : : : :
: SEQ : TIME : I : FUNC : DISC : : NOMENCLATURE : : FUNCTION : : VALUE : : ELSE : : DURATION : : LCC : : : : S :
: : CD : : T : : : : : : : : : : : : : : : : : : : : : : : : S :
: : CLOCK : E : : : : : : : : : : : : : : : : : : : : : : : : F :
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500-00 CMD INTG LAUNCH SEQUENCE HOLD CMD-LS ON
500-01 CMD INTG RECYCLE CMD-LS ON

```

```

$ BREAKOUT NOTIFICATION TO ALL FR CONSOLES $

```

```

$ NOTE: THE FOLLOWING TWO COMMUNICATIONS INTERRUPTS ARE ISSUED TO ALL CONSOLES IN PARALLEL WITH THE GLS INITIATION OF ITS SAFING ROUTINE. THEY INDICATE THAT BREAKOUT HAS OCCURRED AND THAT SYSTEMS ARE NOW IN CONTROL OF THE FEP PROCESSING OF GLS CVFY MEASUREMENTS NOT APPEARING IN SAFING.

```

```

NOTICE: NO SYSTEM SAFING IS TO BE DONE UNTIL THE GLS SAFING COMPLETE FLAG IS ISSUED.

```

```

501-00 CMD INTG GLS BREAKOUT N011INTGR ON
501-01 CMD INTG SYSTEMS IN CONTROL N012INTGR ON

```

```

$ NOTIFY CCE OF GLS BREAKOUT/SAFING $
501-02 K CMD CINTG GLS BREAKOUT FLAG - PRI GCNK3081E ON
501-03 K CMD CINTG GLS BREAKOUT FLAG - SEC GCNK3581E ON

```

```

502-00 VFY INTG GO FOR MAIN ENG START ON GTO NEXT SEQ
502-01 ST300 VFY INTG COUNTDOWN TIME V90W8380C1 -530 NOHI SEC GTO NEXT SEQ
502-02 VFY INTG LAUNCH SEQUENCE ABORT FLAG V90X8382X1 OFF NOHI SEC GTO NEXT SEQ
502-03 CMD INTG LAUNCH SEQUENCE HOLD CMD-LS ON GTO NEXT SEQ

```



```

DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S9005 - L :
:
: SEQ : TIME : I : FUNC : DISC : NOMENCLATURE : FUNCTION : SINGL : ELSE : DURATION : LCC :
: : : : : : : : : : : : : : : : : : : : : : : : :
: CD : T : : : : : : : : : : : : : : : : : : :
: CLOCK : E : : : : : : : : : : : : : : : : : : :
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506-05 CMD BPYR RH IGNITION S/A DEVICE 2 SAFE B55K4002XL ON

\$ POWER DOWN GSE PIC RACKS \$  
\$ GLS EVENT COMPLETE LESS THAN 21 \$

CMD	EPDC	SYS A	PIC RACK	DC PWR	OFF	GMSK1108E	ON
506-06	CMD	EPDC	SYS A	PIC RACK	DC PWR	OFF	ON
506-07	CMD	EPDC	SYS B	PIC RACK	DC PWR	OFF	ON
506-08	CMD	EPDC	H2-BURN	SYS A	PIC RACK	DC PWR	OFF
506-09	CMD	EPDC	H2-BURN	SYS B	PIC RACK	DC PWR	OFF
506-10	CMD	EPDC	SYS A	CPA	DC PWR	OFF	ON
506-11	CMD	EPDC	SYS B	CPA	DC PWR	OFF	ON
506-12	CMD	EPDC	H2-BURN	SYS A	CPA	DC PWR	OFF
506-13	CMD	EPDC	H2-BURN	SYS B	CPA	DC PWR	OFF

\$ DELAY 2 SEC \$

CMD	EPDC	SYS A	PIC RACK	DC PWR	OFF	GMSK1108E	OFF
506-14	CMD	EPDC	SYS A	PIC RACK	DC PWR	OFF	OFF
506-15	CMD	EPDC	SYS B	PIC RACK	DC PWR	OFF	OFF
506-16	CMD	EPDC	H2-BURN	SYS A	PIC RACK	DC PWR	OFF
506-17	CMD	EPDC	H2-BURN	SYS B	PIC RACK	DC PWR	OFF
506-18	CMD	EPDC	SYS A	CPA	DC PWR	OFF	OFF
506-19	CMD	EPDC	SYS B	CPA	DC PWR	OFF	OFF
506-20	CMD	EPDC	H2-BURN	SYS A	CPA	DC PWR	OFF
506-21	CMD	EPDC	H2-BURN	SYS B	CPA	DC PWR	OFF

\$ PERFORM NEXT 3 STEPS IF LOX PREPRESS HAS BEEN INITIATED \$  
\$ GLS EVENT COMPLETE LESS THAN 175 \$  
\$ TERMINATE LOX PREPRESS \$

CMD	L02	A75082	ET	HE	PRI	PREPRESS	VLV	OP	GLOK2001E	OFF	
507-00	CMD	L02	A75082	ET	HE	PRI	PREPRESS	VLV	OP	OFF	
507-01	CMD	L02	A75080	ET	HE	PREPRESS	SHUTOFF	VL	GLOK2031E	ON	
507-02	CMD	L02	A75086	ET	HE	SEC	PREPRESS	VLV	OP	GLOK3001E	OFF

\$ PERFORM NEXT 3 STEPS IF LH2 PREPRESS HAS BEEN INITIATED \$  
\$ GLS EVENT COMPLETE LESS THAN 117 \$  
\$ TERMINATE LH2 PREPRESS \$

CMD	LH2	A75616	ET	PRS	PR	CTL	VLV	OP	CMD	GLHK4521E	OFF	
508-00	CMD	LH2	A75616	ET	PRS	PR	CTL	VLV	OP	CMD	OFF	
508-01	CMD	LH2	A75617	ET	PRES	SEC	CTL	VLV	OP	C	GLHK4531E	OFF

```

DATE 12-35 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S90C5 - L :
:
: SEQ : TIME : I : FUNC : DISC : NOMENCLATURE : FUNCTION : VALUE : ELSE : DURATION : LCC : S :
: : CD : T : : : : : : : : : : : : : :
: : CLOCK : E : : : : : : : : : : : : : :
: : : : : : : : : : : : : : : : : : : :
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508-02 CMD LH2 A75610 ET PRESS SOV CL CMD GLHK4541E ON

```

$ *****
$ ***** NORMAL SAFING *****
$ *****

```

\$ GO TO EVENT AT TIME OF BREAKOUT \$

\$ GLS EVENT COMPLETE LESS THAN 7 \$  
 \$ GCU COOLING RECONFIGURE \$

```

509-00 CMD ECLS GCU1 PUMP1 STOP CMD GFRK1030E OFF
509-01 CMD ECLS GCU1 PUMP2 STOP CMD GFRK1040E OFF
509-02 CMD ECLS GCU1 PUMP3 STOP CMD GFRK1050E OFF

```

```

510-00 CMD ECLS GCU2 PUMP1 STOP CMD GFRK2030E OFF
510-01 CMD ECLS GCU2 PUMP2 STOP CMD GFRK2040E OFF
510-02 CMD ECLS GCU2 PUMP3 STOP CMD GFRK2050E OFF

```

```

511-00 CMD ECLS GCU1 BYP COOLANT CMD GFRK1150E OFF
511-01 CMD ECLS GCU2 BYP COOLANT CMD GFRK2150E OFF

```

```

512-00 $ DELETED $
512-01 $ DELETED $
512-02 $ DELETED $
512-03 $ DELETED $
512-04 $ DELETED $
512-05 $ DELETED $
512-06 VFY ECLS GCU1 SELECT NO3IS044E ON GTO ST310

```

\$ GCU 1 START UP \$

```

513-00 CMD ECLS GCU1 SUPPLY COOLANT CMD GFRK1140E ON
513-01 CMD INTG GCU1 SELECT
513-02 CMD INTG

```

\$ GCU2 START UP \$  
 GCU2 SUPPLY COOLANT CMD GFRK2140E ON

SKIP SEQ

DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S9005 - L :

SEQ : TIME : I : FUNC : DISC : : NOMENCLATURE : : FUNCTION : : ELSE : : DURATION : : LCC : : S :  
 CD : T : S :  
 CLOCK : E : F :  
 : D :

514-01 CMD INTG GCU2 SELECT  
 \$ GLS EVENT COMPLETE LESS THAN 9 \$

\$ TERM LH2 RECIRC AND CLOSE VLVS \$  
 515-01 CMD MPS IT111 LH2 PUMP 1 PRI BUS CMD GLHK0173E OFF  
 515-02 CMD MPS IT112 LH2 PUMP 2 PRI BUS CMD GLHK0174E OFF  
 515-03 CMD MPS IT113 LH2 PUMP 3 PRI BUS CMD GLHK0175E OFF  
 515-04 CMD MPS IT211 LH2 PUMP 1 BUS CMD GLHK0276E OFF  
 515-05 CMD MPS IT212 LH2 PUMP 2 BUS CMD GLHK0277E OFF  
 515-06 CMD MPS IT213 LH2 PUMP 3 BUS CMD GLHK0278E OFF  
 515-07 CMD MPS LH2 HI POINT BLEED VLV OPEN CMD A V41K1465NL OFF  
 515-08 CMD MPS LH2 HI POINT BLEEN VLV OPEN CMD B V41K1466NL OFF  
 515-09 CMD MPS LH2 RECIRC VLVS OPEN CMD V41K1111NL OFF  
 515-10 CMD EPDC IT110 BUS ON CMD GASK0154E OFF  
 515-11 CMD EPDC IT210 BUS ON CMD GASK0255E OFF

\$ GLS EVENT COMPLETE LESS THAN 10 \$

\$ SAFE H2 BURN SYSTEM \$  
 516-00 CMD EPDC H2-BURN SYS A FIRE 1 GMSK5013E OFF  
 516-01 CMD EPDC H2-BURN SYS B FIRE 1 GMSK6013E OFF  
 516-02 CMD EPDC H2-BURN SYS A FIRE 2 GMSK5014E OFF  
 516-03 CMD EPDC H2-BURN SYS B FIRE 2 GMSK6014E OFF

\$ -10.00 \$

\$ GLS EVENT COMPLETE LESS THAN 13 \$

\$ INHIBIT RSS \$  
 517-00 CMD BRS LH RSS A INHIBIT/RESET CMD B55K3519E OFF  
 517-01 CMD BRS RH RSS A INHIBIT/RESET CMD B55K4519E OFF  
 517-02 CMD BRS LH RSS B INHIBIT/RESET CMD B55K3520E OFF  
 517-03 CMD BRS RH RSS B INHIBIT/RESET CMD B55K4520E OFF  
 517-04 CMD BRS ET RSS INHIBIT/RESET CMD T55K3001E OFF

\$ GLS EVENT COMPLETE LESS THAN 14 \$

\$ UNLOCK SRB AFT MDM'S \$  
 518-00 CMD INTG UNLOCK SRB MDM FOR B75K3067XL ON  
 518-01 CMD INTG UNLOCK SRB MDM FOR B75K3068XL ON

DATE 1 85 : GROUND LAUNCH SEQUENCE DESCRIPTION - LCD STS 33 DOCUMENT - LCD STS 33 OMI S90C5

SEQ : TIME : I : FUNC : DISC : NOMENCLATURE : FUNCTION : VALUE : ELSE : DURATION : LCC : S : S :  
: CD : T : : : : : : : : : : : : : : : :  
: CLOCK : E : : : : : : : : : : : : : : : :  
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518-02 CMD INTG UNLOCK SRB MDM FOR B75K4067XL ON  
518-03 CMD INTG UNLOCK SRB MDM FOR B75K4068XL ON

\$ -28.00 \$

\$ GLS EVENT COMPLETE LESS THAN 29 \$

\$ SRB APU TURBINE SPEED LIMIT CHANGE \$

APU	Rate	SNR	NOL	Value	Unit
LH	87.4	2	846R1408C1	87.4	KRPM
RH	87.4	2	846R1409C1	87.4	KRPM
LH	87.4	2	846R2408C1	87.4	KRPM
RH	87.4	2	846R2409C1	87.4	KRPM

519-50 V CMD WATR LH2 AREA WASHDOWN INITIATE CMD XWDKV061E OFF  
519-51 V CMD WATR L02 AREA WASHDOWN INITIATE CMD XWDKV071E OFF

\$ STOP SRB APU \$

System	Start	APU	Valve
LH HPU SYSTEM A-1	START	B58K3016XL	OFF
LH HPU SYSTEM A-2	START	B58K3017XL	OFF
LH HPU SYSTEM B-1	START	B58K3018XL	OFF
LH HPU SYSTEM B-2	START	B58K3019XL	OFF
RH HPU SYSTEM A-1	START	B58K4016XL	OFF
RH HPU SYSTEM A-2	START	B58K4017XL	OFF
RH HPU SYSTEM B-1	START	B58K4018XL	OFF
RH HPU SYSTEM B-2	START	B58K4019XL	OFF
LH HYD PUMP A	BYPASS VLV OPEN	B58K3020XL	OFF
LH HYD PUMP B	BYPASS VLV OPEN	B58K3021XL	OFF
RH HYD PUMP A	BYPASS VLV OPEN	B58K4020XL	OFF
RH HYD PUMP B	BYPASS VLV OPEN	B58K4021XL	OFF

\$ GLS EVENT COMPLETE LESS THAN 32 \$

\$ OPEN L02 OVERBOARD BLEED VALVES \$

Valve	APU	Valve	
L02 OVERBOARD B/V CLOSE	CMD A	V41K1584XL	OFF
L02 OVERBOARD B/V CLOSE	CMD B	V41K1585XL	OFF
L02 OVERBOARD B/V CLOSE	CMD C	V41K1586XL	OFF

\$ -38.00 \$

DATE	TIME	CD	CLOCK	SEQ	TIME	CD	CLOCK	DISC	FUNCTION	DESCRIPTION	UNIT	VALUE	OTHER
12-10-85										GROUND LAUNCH SEQUENCE	LCD STS 33		OMI S9005 - L
523-00										CMD INTG VENT DOOR SAFING ENABLED	S013	ON	
524-00										\$ GLS EVENT COMPLETE LESS THAN 49 \$			
524-01										\$ TERM SRB RECORDERS \$			
										CMD BINS LH FDM AUTO CAL CMD	B78K5002XL	OFF	
										CMD BINS RH FDM AUTO CAL CMD	B78K6002XL	OFF	
524-02										CMD BINS LH DFI FLT RC DR INHB CMD	B78K5003XL	ON	
524-03										CMD BINS RH DFI FLT RC DR INHB CMD	B78K6003XL	ON	
										\$ -40.00 \$			
525-00										\$ GLS EVENT COMPLETE LESS THAN 56 \$			
525-01										\$ DISARM H2 BURN SYS \$			
										CMD EPDC H2-BURN SYS A ARM	GMSK5012E	OFF	
										CMD EPDC H2-BURN SYS B ARM	GMSK6012E	OFF	
526-00										VFY INTG LAUNCH SEQUENCE ABORT FLAG	V90X8382X1	OFF	GTO ST340
527-00										\$ GLS EVENT COMPLETE LESS THAN 174 \$			
527-01										\$ ACTIVATE ENGINE G2 PURGE GSE \$			
527-02										CMD SSME MPENG G2 PRG VNT OPN CMD	GGNK1050E	OFF	
527-03										CMD SSME MPENG G2 PRG VNT OPN CMD	GGNK1140E	OFF	
527-04										CMD SSME MPENG G2 PRG VNT OPN CMD OVR	GGNK1057E	ON	
527-05										CMD SSME MPENG G2 PRG VNT OPN CMD OVR (R)	GGNK1147E	ON	
527-06										CMD SSME MPENG G2 PRG CNT VLV CLD CMD	GGNK1030E	OFF	
527-07										CMD SSME MPENG G2 PRG CNT VLV CLD CMD (R)	GGNK1130E	OFF	
										CMD SSME MPENG G2 PRG CNT VLV CLD CMD OVR	GGNK1037E	ON	
										CMD SSME MPENG G2 PRG CNT VLV CLD CMD OVR (R)	GGNK1137E	ON	
										\$ -02:55 \$			
528-00										\$ GLS EVENT COMPLETE LESS THAN 240 \$			
528-01										\$ INITIATE PURGE SEQUENCE 3 \$			
										VFY SSME ME-1 PHASE IN EFFECT	E41J1512B1	B010	GTO ST320
										VFY SSME ME-1 OPERATING MODE	E41J1513B1	B011	GTO ST315
528-02										ISSU SSME ME-1 RESUME COMMAND	E41K1202BL	ON	





DATE	TIME	CD	CLOCK	TR	RS	TR	RS	TR	RS	TR	RS	TR	RS	TR	RS	TR	RS	TR	RS	
12-10-85																				
GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33																				
OMI S90C5 - L																				
530-04																				
ET RSS S/A DEVICE SAFE 2																				
T55K3112XL ON																				
531-00																				
\$ GCU 1 START \$																				
\$ DELETED \$																				
532-00																				
GCU1 PUMP 1 START CMD																				
GFRK1000E ON																				
532-01																				
GCU1 PUMP 2 START CMD																				
GFRK1010E ON																				
532-02																				
GCU2 PUMP 1 START CMD																				
GFRK2000E ON																				
533-00																				
\$ GCU2 START \$																				
\$ DELETED \$																				
534-00																				
\$ DELETED \$																				
534-01																				
GCU2 PUMP 2 START CMD																				
GFRK2010E ON																				
534-02																				
\$ DELETED \$																				
\$ DELAY 2 SECONDS \$																				
\$ GCU PUMP START CMDS OFF \$																				
535-00																				
GCU1 PUMP 1 START CMD																				
GFRK1000E OFF																				
535-01																				
GCU1 PUMP 2 START CMD																				
GFRK1010E OFF																				
535-02																				
GCU2 PUMP 1 START CMD																				
GFRK2000E OFF																				
535-03																				
GCU2 PUMP 2 START CMD																				
GFRK2010E OFF																				
535-04																				
\$ MOVED TO SEQ 578-08 \$																				
535-05																				
\$ MOVED TO SEQ 578-09 \$																				
\$ CHECK OVBV BLEED VALVE \$																				
537-00																				
LOX OVBV BLD VLV OP IND																				
V41X1587E1 ON																				
537-01																				
LOX OVBV BLD VLV CLA IND																				
V41X1580X1 OFF																				
537-02																				
LOX OVBV BLD VLV CLB IND																				
V41X1581X1 OFF																				
538-00																				
ET RSS S/A DEVICE SAFE 1																				
T55K3111XL OFF																				
538-01																				
ET RSS S/A DEVICE SAFE 2																				
T55K3112XL OFF																				
538-02																				
LH IGNITION S/A DEVICE 1 SAFE																				
B55K3001XL OFF																				
538-03																				
LH IGNITION S/A DEVICE 2 SAFE																				
B55K3002XL OFF																				
538-04																				
RH IGNITION S/A DEVICE 1 SAFE																				
B55K4001XL OFF																				
538-05																				
RH IGNITION S/A DEVICE 2 SAFE																				
B55K4002XL OFF																				
538-06																				
LH VOLTAGE IGNITION PIC CAP A																				
B55V1603C1 NOLO 1.5 VDC																				
538-07																				
LH VOLTAGE IGNITION PIC CAP B																				
B55V1604C1 NOLO 1.5 VDC																				
538-08																				
RH VOLTAGE IGNITION PIC CAP A																				
B55V2603C1 NOLO 1.5 VDC																				
538-09																				
RH VOLTAGE IGNITION PIC CAP B																				
B55V2604C1 NOLO 1.5 VDC																				

DATE 12-05 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S90C5 - L

SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
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SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
538-10	VFY	EPDC	LH	VOLTAGE FWD THR PIN PIC CAP A	B55V1605C1 N0LO	1.5	VDC	DISPLAY		
538-11	VFY	EPDC	LH	VOLTAGE FWD THR PIN PIC CAP B	B55V1606C1 N0LO	1.5	VDC	DISPLAY		
538-12	VFY	EPDC	RH	VOLTAGE FWD THR PIN PIC CAP A	B55V2605C1 N0LO	1.5	VDC	DISPLAY		
538-13	VFY	EPDC	RH	VOLTAGE FWD THR PIN PIC CAP B	B55V2606C1 N0LO	1.5	VDC	DISPLAY		
538-14	VFY	EPDC	RH	VOLTAGE AFT UPPER BKT PIC CAP A	B55V2607C1 N0LO	1.5	VDC	DISPLAY		
538-15	VFY	EPDC	RH	VOLTAGE AFT UPPER BKT PIC CAP B	B55V2608C1 N0LO	1.5	VDC	DISPLAY		
538-16	VFY	EPDC	RH	VOLTAGE AFT MID BKT PIC CAP A	B55V2609C1 N0LO	1.5	VDC	DISPLAY		
538-17	VFY	EPDC	RH	VOLTAGE AFT MID BKT PIC CAP B	B55V2610C1 N0LO	1.5	VDC	DISPLAY		
538-18	VFY	EPDC	RH	VOLTAGE AFT LOWER BKT PIC CAP A	B55V2611C1 N0LO	1.5	VDC	DISPLAY		
538-19	VFY	EPDC	RH	VOLTAGE AFT LOWER BKT PIC CAP B	B55V2612C1 N0LO	1.5	VDC	DISPLAY		
538-20	VFY	EPDC	LH	VOLTAGE AFT UPPER BKT PIC CAP A	B55V1607C1 N0LO	1.5	VDC	DISPLAY		
538-21	VFY	EPDC	LH	VOLTAGE AFT UPPER BKT PIC CAP B	B55V1608C1 N0LO	1.5	VDC	DISPLAY		
538-22	VFY	EPDC	LH	VOLTAGE AFT MID BKT PIC CAP A	B55V1609C1 N0LO	1.5	VDC	DISPLAY		
538-23	VFY	EPDC	LH	VOLTAGE AFT MID BKT PIC CAP B	B55V1610C1 N0LO	1.5	VDC	DISPLAY		
538-24	VFY	EPDC	LH	VOLTAGE AFT LOWER BKT PIC CAP A	B55V1611C1 N0LO	1.5	VDC	DISPLAY		
538-25	VFY	EPDC	LH	VOLTAGE AFT LOWER BKT PIC CAP B	B55V1612C1 N0LO	1.5	VDC	DISPLAY		
538-26	VFY	EPDC	LH	VOLTAGE FWD SEP MOTOR PIC CAP A	B55V1613C1 N0LO	1.5	VDC	DISPLAY		
538-27	VFY	EPDC	LH	VOLTAGE FWD SEP MOTOR PIC CAP B	B55V1614C1 N0LO	1.5	VDC	DISPLAY		
538-28	VFY	EPDC	RH	VOLTAGE FWD SEP MOTOR PIC CAP A	B55V2613C1 N0LO	1.5	VDC	DISPLAY		
538-29	VFY	EPDC	RH	VOLTAGE FWD SEP MOTOR PIC CAP B	B55V2614C1 N0LO	1.5	VDC	DISPLAY		
538-30	VFY	EPDC	LH	VOLTAGE AFT SEP MOTOR PIC CAP A	B55V1615C1 N0LO	1.5	VDC	DISPLAY		
538-31	VFY	EPDC	LH	VOLTAGE AFT SEP MOTOR PIC CAP B	B55V1616C1 N0LO	1.5	VDC	DISPLAY		
538-32	VFY	EPDC	RH	VOLTAGE AFT SEP MOTOR PIC CAP A	B55V2615C1 N0LO	1.5	VDC	DISPLAY		
538-33	VFY	EPDC	RH	VOLTAGE AFT SEP MOTOR PIC CAP B	B55V2616C1 N0LO	1.5	VDC	DISPLAY		

\$ -05:00 \$

\$ GLS EVENT COMPLETE LESS THAN 445 \$  
\$ EMERGENCY EXTEND ORBITER ACCESS ARM \$

539-00	K	CMD	ARMS	OAA OPEN PRI RETRACT SUPPLY V	GS AK7210E	OFF				
539-01	K	CMD	ARMS	OAA OPEN PRI RETRACT SUPPLY V	GS AK7215E	OFF				
539-02	K	CMD	ARMS	OAA OPEN PRI RETRACT RETURN V	GS AK7230E	OFF				
539-03	K	CMD	ARMS	OAA OPEN PRI RETRACT RETURN V	GS AK7235E	OFF				
540-00	K	CMD	ARMS	OAA OPEN SEC RETRACT SUPPLY V	GS AK7250E	OFF				
540-01	K	CMD	ARMS	OAA OPEN SEC RETRACT SUPPLY V	GS AK7255E	OFF				
540-02	K	CMD	ARMS	OAA OPEN SEC RETRACT RETURN V	GS AK7270E	OFF				
540-03	K	CMD	ARMS	OAA OPEN SEC RETRACT RETURN V	GS AK7275E	OFF				
541-00	K	CMD	ARMS	OAA RESET PRI EXTEND PILOT V	GS AK7160E	OFF				
541-01	K	CMD	ARMS	OAA RESET PRI EXTEND PILOT V	GS AK7165E	OFF				

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
:	CD	T	:	:	:	:	:	:	:	:	:
:	CLOCK	E	:	:	:	DESIGNATOR	SINGL	:	:	:	:
:	:	:	:	:	:	:	OR LO	HIGH	UNIT	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
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:	:	:	:	:	:	:	:	:	:	:	:

541-02	K	CMD	ARMS	AAA	RESET	SEC	EXTEND	PILOT	V	GSAK7180E	OFF
541-03	K	CMD	ARMS	AAA	RESET	SEC	EXTEND	PILOT	V	GSAK7185E	OFF
542-00	K	CMD	ARMS	AAA	CLOSE	PRI	RETRACT	SUPPLY	V	GSAK7200E	ON
542-01	K	CMD	ARMS	AAA	CLOSE	PRI	RETRACT	SUPPLY	V	GSAK7205E	ON
542-02	K	CMD	ARMS	AAA	CLOSE	PRI	RETRACT	RETURN	V	GSAK7220E	ON
542-03	K	CMD	ARMS	AAA	CLOSE	PRI	RETRACT	RETURN	V	GSAK7225E	ON
543-00	K	CMD	ARMS	AAA	CLOSE	SEC	RETRACT	SUPPLY	V	GSAK7240E	ON
543-01	K	CMD	ARMS	AAA	CLOSE	SEC	RETRACT	SUPPLY	V	GSAK7245E	ON
543-02	K	CMD	ARMS	AAA	CLOSE	SEC	RETRACT	RETURN	V	GSAK7260E	ON
543-03	K	CMD	ARMS	AAA	CLOSE	SEC	RETRACT	RETURN	V	GSAK7265E	ON
544-00	K	CMD	ARMS	AAA	LCHBACK	SPLY	V-UNLATCH			GSAK7510E	ON
544-01	K	CMD	ARMS	AAA	LCHBACK	SPLY	V-UNLATCH			GSAK7515E	ON
545-00	K	CMD	ARMS	AAA	CLOSE	GN2	INHIBIT	V		GSAK7100E	ON
545-01	K	CMD	ARMS	AAA	CLOSE	GN2	INHIBIT	V		GSAK7105E	ON
546-00	K	CMD	ARMS	AAA	LOCK	PRI	EXTEND	LOCK	V	GSAK7130E	OFF
546-01	K	CMD	ARMS	AAA	LOCK	PRI	EXTEND	LOCK	V	GSAK7135E	OFF
546-02	K	CMD	ARMS	AAA	LOCK	SEC	EXTEND	LOCK	V	GSAK7150E	OFF
546-03	K	CMD	ARMS	AAA	LOCK	SEC	EXTEND	LOCK	V	GSAK7155E	OFF
547-00	K	CMD	ARMS	AAA	UNLOCK	PRI	EXTEND	LOCK	V	GSAK7120E	ON
547-01	K	CMD	ARMS	AAA	UNLOCK	PRI	EXTEND	LOCK	V	GSAK7125E	ON
547-02	K	CMD	ARMS	AAA	UNLOCK	SEC	EXTEND	LOCK	V	GSAK7140E	ON
547-03	K	CMD	ARMS	AAA	UNLOCK	SEC	EXTEND	LOCK	V	GSAK7145E	ON
548-00	K	CMD	ARMS	AAA	OPEN	PRI	EXTEND	PILOT	V	GSAK7170E	ON
548-01	K	CMD	ARMS	AAA	OPEN	PRI	EXTEND	PILOT	V	GSAK7175E	ON
548-02	K	CMD	ARMS	AAA	OPEN	SEC	EXTEND	PILOT	V	GSAK7190E	ON
548-03	K	CMD	ARMS	AAA	OPEN	SEC	EXTEND	PILOT	V	GSAK7195E	ON
549-00	K	CMD	ARMS	AAA	OPEN	ACCUM	CHARGING	V		GSAK7080E	ON
549-01	K	CMD	ARMS	AAA	OPEN	ACCUM	CHARGING	V		GSAK7085E	ON
549-02	K	CMD	ARMS	AAA	LCHBACK	SPLY	V-UNLATCH			GSAK7510E	OFF



DATE	TIME	ISSUE	FUNCTION	DESCRIPTION	SEQUENCE	STATUS	OPERATING MODE	CONTROL	ENABLE	SAFING	PHASE	IN EFFECT	UNIT	VALUE	DURATION	LCC	PAGE
12-10-85				GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33													OMI S90G5 - L
552-03		ISSU	SSME	ME-1 LIMIT CONTROL ENABLE CMD	E41K1211BL	ON											
552-04		ISSU	SSME	ME-1 RESUME CMD	E41K1202BL	ON											
552-05		ISSU	SSME	ME-1 PURGE SEQUENCE 3 CMD	E41K1215BL	ON											
552-06	ST352	CMD	INTG	ENABLE ME-1 SAFING													
553-00	ST353	VFY	SSME	ME-2 PHASE IN EFFECT	E41J2512B1	B010											
553-01		VFY	SSME	ME-2 OPERATING MODE	E41J2513B1	B011											
				GTO ST355													
553-02	ST354	ISSU	SSME	ME-2 RESUME CMD	E41K2202BL	ON											
553-03		ISSU	SSME	ME-2 LIMIT CONTROL ENABLE CMD	E41K2211BL	ON											
553-04		ISSU	SSME	ME-2 RESUME CMD	E41K2202BL	ON											
553-05		ISSU	SSME	ME-2 PURGE SEQUENCE 3 CMD	E41K2215BL	ON											
553-06	ST355	CMD	INTG	ENABLE ME-2 SAFING													
554-00	ST356	VFY	SSME	ME-3 PHASE IN EFFECT	E41J3512B1	B010											
554-01		VFY	SSME	ME-3 OPERATING MODE	E41J3513B1	B011											
				GTO ST358													
554-02	ST357	ISSU	SSME	ME-3 RESUME CMD	E41K3202BL	ON											
554-03		ISSU	SSME	ME-3 LIMIT CONTROL ENABLE CMD	E41K3211BL	ON											
554-04		ISSU	SSME	ME-3 RESUME CMD	E41K3202BL	ON											
554-05		ISSU	SSME	ME-3 PURGE SEQUENCE 3 CMD	E41K3215BL	ON											
554-06	ST358	CMD	INTG	ENABLE ME-3 SAFING													
555-00	ST359	VFY	INTG	ENABLE ME-1 SAFING													
555-01		VFY	SSME	ME-1 OPERATING MODE	E41J1513B1	B011											
555-02		CMD	INTG	ENABLE ME-1 SAFING													
				GTO 361													
555-03	ST360	VFY	SSME	ME-1 PHASE IN EFFECT	E41J1512B1	B110											
555-04		CMD	INTG	ENABLE ME-1 SAFING													
556-00	ST361	VFY	INTG	ENABLE ME-2 SAFING													
556-01		VFY	SSME	ME-2 OPERATING MODE	E41J2513B1	B011											
556-02		CMD	INTG	ENABLE ME-2 SAFING													
				GTO ST363													
556-03	ST362	VFY	SSME	ME-2 PHASE IN EFFECT	E41J2512B1	B110											

SEQ	TIME	CD	INTG	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
:	:	CD	:	:	:	:	:	:	:	:	:	:
:	:	CLOCK	:	:	:	:	DESIGNATOR	SINGL	:	:	PAGE	:
:	:	:	:	:	:	:	OR LO	HIGH	UNIT	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	F
:	:	:	:	:	:	:	:	:	:	:	:	D
556-04			CMD	INTG	ENABLE	ME-2 SAFING				3		
557-00	ST363		VFY	INTG	ENABLE	ME-3 SAFING			GTO ST364			
557-01			VFY	SSME	ME-3 OPERATING MODE		E41J3513B1	B011	GTO ST365			
557-02			CMD	INTG	ENABLE	ME-3 SAFING						
557-03	ST364		VFY	SSME	ME-3 PHASE IN EFFECT		E41J3512B1	B110				
557-04			CMD	INTG	ENABLE	ME-3 SAFING						
557-05	ST365		VFY	INTG	ENABLE	ME-1 SAFING		2 / 3	GTO ST359			
557-06			VFY	INTG	ENABLE	ME-2 SAFING		2 / 3	GTO ST359			
557-07			VFY	INTG	ENABLE	ME-3 SAFING		2 / 3	GTO ST359			

NOTE: FAILURE OF THE ABOVE 3 VFY'S WILL CAUSE SAFING TO REPEAT THE ENGINE STATUS VERIFICATIONS UNTIL ALL ARE SATISFIED OR UNTIL OPERATOR INPUT IS MADE TO CONTINUE INTO MPS/SSME SAFING OR TO BYPASS MPS/SSME SAFING. IF BYPASS IS SELECTED, THEN SAFING WILL BRANCH TO ST379. \$

SEQ	TIME	CD	INTG	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
560-00	ST370		VFY	MPS	ME-1	L02 PREVLV	CLOSE	IND				
560-01			CMD	MPS	E-1	L02 PREVLV	OPEN	CMD A	V41X1135E1	OFF		
560-02			CMD	MPS	E-1	L02 PREVLV	OPEN	CMD B	V41K1136XL	ON	GTO ST371	
560-03			CMD	MPS	E-1	L02 PREVLV	OPEN	CMD C	V41K1137XL	ON		
560-04			CMD	MPS	E-1	L02 PREVLV	OPEN	CMD D	V41K1138XL	ON		
560-05			CMD	MPS	E-1	L02 PREVLV	CLOSED	CMD A	V41K1139XL	ON		
560-06			CMD	MPS	E-1	L02 PREVLV	CLOSED	CMD B	V41K1140XL	ON		
560-07			CMD	MPS	E-1	L02 PREVLV	CLOSED	CMD C	V41K1141XL	ON		
560-08			CMD	MPS	E-1	L02 PREVLV	CLOSED	CMD D	V41K1142XL	ON		
560-09			CMD	MPS	E-1	L02 PREVLV	OPEN	CMD A	V41K1136XL	OFF		
560-10			CMD	MPS	E-1	L02 PREVLV	OPEN	CMD B	V41K1137XL	OFF		
560-11			CMD	MPS	E-1	L02 PREVLV	OPEN	CMD C	V41K1138XL	OFF		
560-12			CMD	MPS	E-1	L02 PREVLV	OPEN	CMD D	V41K1143XL	OFF		
560-13			\$		DELETED	\$						
560-14			\$		DELETED	\$						
560-15			\$		DELETED	\$						
560-16			\$		DELETED	\$						

561-00 ST371 VFY MPS E-1 LH2 PREVLV CLOSED IND V41X1105E1 OFF GTO ST372

DATE	TIME	SEQ	TIME	CD	CLOCK	S	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
12-10-85										GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33						OMI S9005 - L
561-01		CMD	MPS	E-1	LH2	PREVLV	OPEN	CMD	A	V41K1119XL	ON					
561-02		CMD	MPS	E-1	LH2	PREVLV	OPEN	CMD	B	V41K1120XL	ON					
561-03		CMD	MPS	E-1	LH2	PREVLV	OPEN	CMD	C	V41K1121XL	ON					
561-04		CMD	MPS	E-1	LH2	PREVLV	CLOSE	CMD	A	V41K1122XL	ON					
561-05		CMD	MPS	E-1	LH2	PREVLV	CLOSE	CMD	B	V41K1123XL	ON					
561-06		CMD	MPS	E-1	LH2	PREVLV	CLOSE	CMD	C	V41K1124XL	ON					
561-07		CMD	MPS	E-1	LH2	PREVLV	OPEN	CMD	A	V41K1119XL	OFF					
561-08		CMD	MPS	E-1	LH2	PREVLV	OPEN	CMD	B	V41K1120XL	OFF					
561-09		CMD	MPS	E-1	LH2	PREVLV	OPEN	CMD	C	V41K1121XL	OFF					
561-10																
561-11																
561-12																
561-13	ST372	CVFY	SSME	MPS	ENG	NO. 1	LH2	INLET	PRESS	V41P1100C1	NOLO	90	PSIA	CPER	G002	
561-14		VFY	MPS	ME-2	L02	PREVLV	CLOSE	IND		V41X1235E1	OFF					
561-15		CMD	MPS	E-2	L02	PREVLV	OPEN	CMD	A	V41K1236XL	ON					GTO ST373
561-16		CMD	MPS	E-2	L02	PREVLV	OPEN	CMD	B	V41K1237XL	ON					
561-17		CMD	MPS	E-2	L02	PREVLV	OPEN	CMD	C	V41K1238XL	ON					
561-18		CMD	MPS	E-2	L02	PREVLV	OPEN	CMD	D	V41K1243XL	ON					
561-19		CMD	MPS	E-2	L02	PREVLV	CLOSE	CMD	A	V41K1239XL	ON					
561-20		CMD	MPS	E-2	L02	PREVLV	CLOSE	CMD	B	V41K1240XL	ON					
561-21		CMD	MPS	E-2	L02	PREVLV	CLOSE	CMD	C	V41K1241XL	ON					
561-22		CMD	MPS	E-2	L02	PREVLV	CLOSE	CMD	D	V41K1242XL	ON					
561-23		CMD	MPS	E-2	L02	PREVLV	OPEN	CMD	A	V41K1236XL	OFF					
561-24		CMD	MPS	E-2	L02	PREVLV	OPEN	CMD	B	V41K1237XL	OFF					
561-25		CMD	MPS	E-2	L02	PREVLV	OPEN	CMD	C	V41K1238XL	OFF					
561-26		CMD	MPS	E-2	L02	PREVLV	OPEN	CMD	D	V41K1243XL	OFF					
561-27																
561-28																
561-29																
561-30																
562-00	ST373	VFY	MPS	ME-2	LH2	PREVLV	CLOSE	IND		V41X1205E1	OFF					GTO ST374
562-01		CMD	MPS	E-2	LH2	PREVLV	OPEN	CMD	A	V41K1219XL	ON					
562-03		CMD	MPS	E-2	LH2	PREVLV	OPEN	CMD	B	V41K1220XL	ON					
562-04		CMD	MPS	E-2	LH2	PREVLV	OPEN	CMD	C	V41K1221XL	ON					
562-05		CMD	MPS	E-2	LH2	PREVLV	CLOSE	CMD	A	V41K1222XL	ON					

SEQ : TIME : I : FUNC : DISC : NOMENCLATURE : FUNCTION : VALUE : ELSE : DURATION : LCC : S :  
 CD : T : : : : : : : : : : : : : S :  
 CLOCK : E : : : : : : : : : : : : : F :  
 : : : : : : : : : : : : : : : : : D :

562-06 CMD MPS E-2 LH2 PREVLV CLOSE CMD B V41K1223XL ON  
 562-07 CMD MPS E-2 LH2 PREVLV CLOSE CMD C V41K1224XL ON  
 562-08 CMD MPS E-2 LH2 PREVLV OPEN CMD A V41K1219XL OFF  
 562-09 CMD MPS E-2 LH2 PREVLV OPEN CMD B V41K1220XL OFF  
 562-10 CMD MPS E-2 LH2 PREVLV OPEN CMD C V41K1221XL OFF  
 562-11 \$ DELETED \$  
 562-12 \$ DELETED \$  
 562-13 \$ DELETED \$  
 562-14 CVFY SSME ST374 MPS ENG NO. 2 LH2 INLET PRESS V41P1200C1 N0L0 90 PSIA CPER G003  
 562-15 OMSG INTG ENG 2 SAFING ENABLED

563-00 VFY MPS ME-3 L02 PREVLV CLOSE IND  
 563-01 CMD MPS E-3 L02 PREVLV OPEN CMD A V41X1335E1 OFF  
 563-02 CMD MPS E-3 L02 PREVLV OPEN CMD B V41K1336XL ON  
 563-03 CMD MPS E-3 L02 PREVLV OPEN CMD C V41K1337XL ON  
 563-04 CMD MPS E-3 L02 PREVLV OPEN CMD D V41K1338XL ON  
 563-05 CMD MPS \$ DELAY 3 SEC \$ V41K1343XL ON  
 563-06 CMD MPS E-3 L02 PREVLV CLOSE CMD A V41K1339XL ON  
 563-07 CMD MPS E-3 L02 PREVLV CLOSE CMD B V41K1340XL ON  
 563-08 CMD MPS E-3 L02 PREVLV CLOSE CMD C V41K1341XL ON  
 563-09 CMD MPS E-3 L02 PREVLV CLOSE CMD D V41K1342XL ON  
 563-10 CMD MPS E-3 L02 PREVLV OPEN CMD A V41K1336XL OFF  
 563-11 CMD MPS E-3 L02 PREVLV OPEN CMD B V41K1337XL OFF  
 563-12 CMD MPS E-3 L02 PREVLV OPEN CMD C V41K1338XL OFF  
 563-13 CMD MPS E-3 L02 PREVLV OPEN CMD D V41K1343XL OFF  
 563-14 \$ DELETED \$  
 563-15 \$ DELETED \$  
 563-16 \$ DELETED \$

564-00 ST375 VFY MPS ME-3 LH2 PREVLV CLOSE IND  
 564-01 CMD MPS E-3 LH2 PREVLV OPEN CMD A V41X1305E1 OFF  
 564-02 CMD MPS E-3 LH2 PREVLV OPEN CMD B V41K1319XL ON  
 564-03 CMD MPS E-3 LH2 PREVLV OPEN CMD C V41K1320XL ON  
 564-04 CMD MPS \$ DELAY 3 SEC \$ V41K1321XL ON  
 564-05 CMD MPS E-3 LH2 PREVLV CLOSE CMD A V41K1322XL ON  
 564-06 CMD MPS E-3 LH2 PREVLV CLOSE CMD B V41K1323XL ON  
 564-07 CMD MPS E-3 LH2 PREVLV CLOSE CMD C V41K1324XL ON  
 564-08 CMD MPS E-3 LH2 PREVLV OPEN CMD A V41K1319XL OFF  
 564-09 CMD MPS E-3 LH2 PREVLV OPEN CMD B V41K1320XL OFF





SEQ	TIME	IS	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
567-13	V	CMD	MPS		PV13 CTL OVERRIDE	NLHIX118E	ON				
567-14	V	CMD	MPS		GCH56V SHUTOFF	NLHK0060X	ON				
567-15	CMD	MPS			ET/ORB 4 IN DISCON PD3 CLS CMD	V41K1422XL	ON				
567-16	CMD	MPS			ET/ORB 4 IN DISCON PD3 OPN CMD	V41K1421XL	OFF				

SEQ	TIME	IS	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
568-00	ST379				\$ S013 L02/LH2 GO FOR SAFING/VENT DOOR MANAGEMENT/APU SHUTDOWN \$	S013					
568-01	CMD	L02			GO FOR SAFING	N013INTGR	ON				
568-02	CMD	LH2			GO FOR SAFING	N013INTGR	ON				
568-03	CMD	MPS			EXPOSED PRI FIRE DETS OFF CMD	GLHK7490E	OFF				
568-04	CMD	MPS			EXPOSED SEC FIRE DETS OFF CMD	GLHK7500E	OFF				

SEQ	TIME	IS	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
568-05	K	CMD	CMPS		\$ TURN-ON CENTAUR L02 VENT HEATERS \$						
568-06	K	CMD	CMPS		CCE GOX VENT HTR CNTL ENABLE - PRI	GCKN4011E	ON				
568-07	K	CMD	CMPS		CCE GOX VENT HTR DC MOD ON - PRI	GCKN6031E	ON				
568-08	K	CMD	CMPS		CCE GOX VENT HTR DC MOD OFF - PRI	GCKN603CE	OFF				
568-09	K	CMD	CMPS		CCE GOX VENT HTR CNTL ENABLE - SEC	GCKN4511E	ON				
568-10	K	CMD	CMPS		CCE GOX VENT HTR DC MOD ON - SEC	GCKN6531E	ON				
568-10	K	CMD	CMPS		CCE GOX VENT HTR DC MOD OFF - SEC	GCKN6530E	OFF				

SEQ	TIME	IS	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
569-00	ST370				LAUNCH SEQUENCE ABORT FLAG	V90X8382X1	OFF				
570-00					\$ MAIN ENGINE PRE-START STATUS CHECKS VERIFY PURGE SEQUENCE 3 \$						
570-01	VFY	SSME			ME-1 OPERATING MODE	E41J1513B1	B011			DISPLAY	GTO ST390
570-02	VFY	SSME			ME-2 OPERATING MODE	E41J2513B1	B011			DISPLAY	GTO ST390
570-02	VFY	SSME			ME-3 OPERATING MODE	E41J3513B1	B011			DISPLAY	GTO ST390

SEQ	TIME	IS	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
571-00	ST380				MSG INTG *** GLS GO FOR APU SHUTDOWN ***						
571-01	ST390				LABL INTG						
571-02	VFY	LH2			FD 35 ALARM ON IND	GLHX7343E	OFF			DISPLAY	
571-03	VFY	MPS			ORB AFT LFT VENT FD 36 ALARM ON	GLHX7453E	OFF			DISPLAY	
571-04	VFY	MPS			ORB AFT LFT VENT FD 37 ALARM ON	GLHX7463E	OFF			DISPLAY	
571-05	VFY	MPS			SSME C/O FD 38 ALARM ON	GLHX7473E	OFF			DISPLAY	
571-06	VFY	MPS			SSME C/O FD 39 ALARM ON	GLHX7483E	OFF			DISPLAY	
571-07	VFY	INTG			LAUNCH SEQUENCE ABORT FLAG	V90X8382X1	ON			DISPLAY	
571-08	CVFY	MPS			SSME C/O FD 38 ALARM ON	GLHX7473E	OFF			CPER	G014
571-09	CVFY	MPS			SSME C/O FD 39 ALARM ON	GLHX7483E	OFF			CPER	G014
571-10	ST395				T-35 FLG SET - START VENT DOOR OPS						

SEQ	TIME	IS	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
572-00	ST400				L AFT VENTS 8/9 OPEN 1	V59X3855X1	ON				
572-00	ST400				L AFT VENTS 8/9 OPEN 1	V59X3855X1	ON				

DATE	TIME	SEQ	TIME	CD	CLOCK	S	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE	OMI
12-10-85										GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33							99005 - L
572-01	VFY	PVD	L AFT	VENTS	8/9	OPEN	2	V59X3865X1	ON			DELAY	1SEC				
572-02	VFY	PVD	R AFT	VENTS	8/9	OPEN	1	V59X4855X1	ON			GTO	ST400				
572-03	VFY	PVD	R AFT	VENTS	8/9	OPEN	2	V59X4865X1	ON			MAX OF 30	RETRIES				
CONTINUE																	
\$ CLEANUP OF RSLs MINUS TIME VENT DOOR CMDS \$																	
573-00	CMD	PVD	L PB/W	VENTS	4/7	OPEN	CMD 1A	V59K3350XL	OFF								
573-01	CMD	PVD	L PB/W	VENTS	4/7	OPEN	CMD 1B	V59K3351XL	OFF								
573-02	CMD	PVD	L PB/W	VENTS	4/7	OPEN	CMD 2A	V59K3360XL	OFF								
573-03	CMD	PVD	L PB/W	VENTS	4/7	OPEN	CMD 2B	V59K3361XL	OFF								
573-04	CMD	PVD	R PB/W	VENTS	4/7	OPEN	CMD 1A	V59K4350XL	OFF								
573-05	CMD	PVD	R PB/W	VENTS	4/7	OPEN	CMD 1B	V59K4351XL	OFF								
573-06	CMD	PVD	R PB/W	VENTS	4/7	OPEN	CMD 2A	V59K4360XL	OFF								
573-07	CMD	PVD	R PB/W	VENTS	4/7	OPEN	CMD 2B	V59K4361XL	OFF								
574-00	CMD	PVD	L PB	VENT	3	OPEN	CMD 1A	V59K3250XL	OFF								
574-01	CMD	PVD	L PB	VENT	3	OPEN	CMD 1B	V59K3251XL	OFF								
574-02	CMD	PVD	L PB	VENT	3	OPEN	CMD 2A	V59K3260XL	OFF								
574-03	CMD	PVD	L PB	VENT	3	OPEN	CMD 2B	V59K3261XL	OFF								
574-04	CMD	PVD	R PB	VENT	3	OPEN	CMD 1A	V59K4250XL	OFF								
574-05	CMD	PVD	R PB	VENT	3	OPEN	CMD 1B	V59K4251XL	OFF								
574-06	CMD	PVD	R PB	VENT	3	OPEN	CMD 2A	V59K4260XL	OFF								
574-07	CMD	PVD	R PB	VENT	3	OPEN	CMD 2B	V59K4261XL	OFF								
575-00	CMD	PVD	L PB	VENT	6	OPEN	CMD 1A	V59K3550XL	OFF								PL
575-01	CMD	PVD	L PB	VENT	6	OPEN	CMD 1B	V59K3551XL	OFF								PL
575-02	CMD	PVD	L PB	VENT	6	OPEN	CMD 2A	V59K3560XL	OFF								PL
575-03	CMD	PVD	L PB	VENT	6	OPEN	CMD 2B	V59K3561XL	OFF								PL
575-04	CMD	PVD	R PB	VENT	6	OPEN	CMD 1A	V59K4550XL	OFF								PL
575-05	CMD	PVD	R PB	VENT	6	OPEN	CMD 1B	V59K4551XL	OFF								PL
575-06	CMD	PVD	R PB	VENT	6	OPEN	CMD 2A	V59K4560XL	OFF								PL
575-07	CMD	PVD	R PB	VENT	6	OPEN	CMD 2B	V59K4561XL	OFF								PL
576-00	CMD	PVD	L PB	VENT	5	OPEN	CMD 1A	V59K3450XL	OFF								
576-01	CMD	PVD	L PB	VENT	5	OPEN	CMD 1B	V59K3451XL	OFF								
576-02	CMD	PVD	L PB	VENT	5	OPEN	CMD 2A	V59K3460XL	OFF								
576-03	CMD	PVD	L PB	VENT	5	OPEN	CMD 2B	V59K3461XL	OFF								
576-04	CMD	PVD	R PB	VENT	5	OPEN	CMD 1A	V59K4450XL	OFF								
576-05	CMD	PVD	R PB	VENT	5	OPEN	CMD 1B	V59K4451XL	OFF								
576-06	CMD	PVD	R PB	VENT	5	OPEN	CMD 2A	V59K4460XL	OFF								



SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
581-01	VFY	PVD	L PB VENT 3 CLOSED 2	V59X3215X1 OFF		1 OF 4				
581-02	VFY	PVD	R PB VENT 3 CLOSED 1	V59X4205X1 OFF		1 OF 4				
581-03	VFY	PVD	R PB VENT 3 CLOSED 2	V59X4215X1 OFF		SKIP SEQ				

SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
582-00	CMD	PVD	L PB VENT 3 CLOSE CMD 1A	V59K3200XL ON						
582-01	CMD	PVD	L PB VENT 3 CLOSE CMD 1B	V59K3201XL ON						
582-02	CMD	PVD	L PB VENT 3 CLOSE CMD 2A	V59K3210XL ON						
582-03	CMD	PVD	L PB VENT 3 CLOSE CMD 2B	V59K3211XL ON						
582-04	CMD	PVD	R PB VENT 3 CLOSE CMD 1A	V59K4200XL ON						
582-05	CMD	PVD	R PB VENT 3 CLOSE CMD 1B	V59K4201XL ON						
582-06	CMD	PVD	R PB VENT 3 CLOSE CMD 2A	V59K4210XL ON						
582-07	CMD	PVD	R PB VENT 3 CLOSE CMD 2B	V59K4211XL ON						

\$ DELAY 2 SECONDS \$

SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
583-00	K VFY	CPVD	L PB VENT 6 PURGE 2 IND 1	V59X3705X1 OFF		1 OF 4				
583-01	K VFY	CPVD	L PB VENT 6 PURGE 2 IND 2	V59X3715X1 OFF		1 OF 4				
583-02	K VFY	CPVD	R PB VENT 6 PURGE 2 IND 1	V59X4705X1 OFF		1 OF 4				
583-03	K VFY	CPVD	R PB VENT 6 PURGE 2 IND 2	V59X4715X1 OFF		GTO ST410				

\$ POST IGN VENT 6 POSITIONING FOR CENTAUR \$

SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
583-04	K CMD	CPVD	PREREQUISITE CONTROL LOGIC	NECK9911X OFF						
583-05	K CMD	CPVD	L PB VENT 6 PURGE 2 CMD 1A	V59K3700XL ON						
583-06	K CMD	CPVD	L PB VENT 6 PURGE 2 CMD 1B	V59K3701XL ON						
583-07	K CMD	CPVD	L PB VENT 6 PURGE 2 CMD 2A	V59K3710XL ON						
583-08	K CMD	CPVD	L PB VENT 6 PURGE 2 CMD 2B	V59K3711XL ON						
583-09	K CMD	CPVD	R PB VENT 6 PURGE 2 CMD 1A	V59K4700XL ON						
583-10	K CMD	CPVD	R PB VENT 6 PURGE 2 CMD 1B	V59K4701XL ON						
583-11	K CMD	CPVD	R PB VENT 6 PURGE 2 CMD 2A	V59K4710XL ON						
583-12	K CMD	CPVD	R PB VENT 6 PURGE 2 CMD 2B	V59K4711XL ON						

\$ POST IGN VENT 6 \$

SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
584-00	VFY	PVD	L PB VENT 6 CLOSED 1	V59X3505X1 OFF		1 OF 4				
584-01	VFY	PVD	L PB VENT 6 CLOSED 2	V59X3515X1 OFF		1 OF 4				
584-02	VFY	PVD	R PB VENT 6 CLOSED 1	V59X4505X1 OFF		1 OF 4				
584-03	VFY	PVD	R PB VENT 6 CLOSED 2	V59X4515X1 OFF		GTO ST 410				



DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S9005 - L :

SEQ : TIME : I : FUNC : DISC : Nomenclature : FUNCTION : VALUE : ELSE : DURATION : LCC : S :

CD : T : : : : : : : : : : : : S :

CLOCK : E : : : : : : : : : : : : F :

: : : : : : : : : : : : D :

587-06 CMD PVD R AFT VENIS 8/9 PURGE CMD 2A V59K4910XL ON

587-07 CMD PVD R AFT VENIS 8/9 PURGE CMD 2b V59K4911XL ON

\$ DELAY 10 SECONDS \$

588-00 ST420 LABL INIG S014

589-00 CMD EPDC FWD LCA 1 FIRE 1 INHIBIT CMD V76K6301NL ON

589-01 CMD EPDC FWD LCA 1 FIRE 2 INHIBIT CMD V76K6302NL ON

589-02 CMD EPDC FWD LCA 2 FIRE 1 INHIBIT CMD V76K6303NL ON

589-03 CMD EPDC FWD LCA 2 FIRE 2 INHIBIT CMD V76K6304NL ON

589-04 CMD EPDC FWD LCA 3 FIRE 1 INHIBIT CMD V76K6305NL ON

589-05 CMD EPDC FWD LCA 3 FIRE 2 INHIBIT CMD V76K6306NL ON

590-00 CMD BINS \$ POWER DOWN SRB DFI \$

590-01 CMD BINS LH DFI SYS PWR OFF CMD B78K5001XL ON

590-01 CMD BINS RH DFI SYS PWR OFF CMD B78K6001XL ON

591-00 CMD BINS \$ DELAY 2 SEC \$

591-01 CMD BINS LH DFI SYS PWR OFF CMD B78K5001XL OFF

591-01 CMD BINS RH DFI SYS PWR OFF CMD B78K6001XL OFF

591-02 CMLT BHYD LH APU A GG HTR 1 ON CMD B46K3022XL OFF

591-02 CMLT BHYD LH APU A GG HTR 2 ON CMD B46K3023XL OFF

591-03 CMLT BHYD LH APU B GG HTR 1 ON CMD B46K3024XL OFF

591-03 CMLT BHYD LH APU B GG HTR 2 ON CMD B46K3025XL OFF

591-04 CMLT BHYD RH APU A GG HTR 1 ON CMD B46K4022XL OFF

591-04 CMLT BHYD RH APU A GG HTR 2 ON CMD B46K4023XL OFF

591-05 CMLT BHYD RH APU B GG HTR 1 ON CMD B46K4024XL OFF

591-05 CMLT BHYD RH APU B GG HTR 2 ON CMD B46K4025XL OFF

592-00 CMD PVD \$ VENIS 4/7 CLOSE CMD OFF \$

592-01 CMD PVD L PB/W VENIS 4/7 CLOSE CMD 1A V59K3300XL OFF

592-02 CMD PVD L PB/W VENIS 4/7 CLOSE CMD 1B V59K3301XL OFF

592-03 CMD PVD L PB/W VENIS 4/7 CLOSE CMD 2A V59K3310XL OFF

592-04 CMD PVD L PB/W VENIS 4/7 CLOSE CMD 2B V59K3311XL OFF

592-05 CMD PVD R PB/W VENIS 4/7 CLOSE CMD 1A V59K4300XL OFF

592-06 CMD PVD R PB/W VENIS 4/7 CLOSE CMD 1B V59K4301XL OFF

592-06 CMD PVD R PB/W VENIS 4/7 CLOSE CMD 2A V59K4310XL OFF

DATE	TIME	CD	CLOCK	SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
85															
GROUND LAUNCH SEQUENCE DESCRIPTION - LCD STS 33															
DOCUMENT - LCD STS 33															
OMI S90C5 - L															
592-07				CMD	PVD	R	PB/W	VENTS	4/7	CLOSE	CMD	2B		V59K4311XL	OFF
593-00				CMD	PVD	L	PB	VENTS	3	CLOSE	CMD	OFF	\$	V59K3200XL	OFF
593-01				CMD	PVD	L	PB	VENTS	3	CLOSE	CMD	1B		V59K3201XL	OFF
593-02				CMD	PVD	L	PB	VENTS	3	CLOSE	CMD	2A		V59K3210XL	OFF
593-03				CMD	PVD	L	PB	VENTS	3	CLOSE	CMD	2B		V59K3211XL	OFF
593-04				CMD	PVD	R	PB	VENTS	3	CLOSE	CMD	1A		V59K4200XL	OFF
593-05				CMD	PVD	R	PB	VENTS	3	CLOSE	CMD	1B		V59K4201XL	OFF
593-06				CMD	PVD	R	PB	VENTS	3	CLOSE	CMD	2A		V59K4210XL	OFF
593-07				CMD	PVD	R	PB	VENTS	3	CLOSE	CMD	2B		V59K4211XL	OFF
594-00				K	CMD	CPVD								NECK9911X	OFF
594-01				K	CMD	CPVD	L	PB	VENT	6	PURGE	2	CMD	1A	OFF
594-02				K	CMD	CPVD	L	PB	VENT	6	PURGE	2	CMD	1B	OFF
594-03				K	CMD	CPVD	L	PB	VENT	6	PURGE	2	CMD	2A	OFF
594-04				K	CMD	CPVD	L	PB	VENT	6	PURGE	2	CMD	2B	OFF
594-05				K	CMD	CPVD	R	PB	VENT	6	PURGE	2	CMD	1A	OFF
594-06				K	CMD	CPVD	R	PB	VENT	6	PURGE	2	CMD	1B	OFF
594-07				K	CMD	CPVD	R	PB	VENT	6	PURGE	2	CMD	2A	OFF
594-08				K	CMD	CPVD	R	PB	VENT	6	PURGE	2	CMD	2B	OFF
GTO ST 426															
594-09				CMD	PVD	L	PB	VENT	6	CLOSE	CMD	OFF	\$	V59K3500XL	OFF
594-10				CMD	PVD	L	PB	VENT	6	CLOSE	CMD	1B		V59K3501XL	OFF
594-11				CMD	PVD	L	PB	VENT	6	CLOSE	CMD	2A		V59K3510XL	OFF
594-12				CMD	PVD	L	PB	VENT	6	CLOSE	CMD	2B		V59K3511XL	OFF
594-13				CMD	PVD	R	PB	VENT	6	CLOSE	CMD	1A		V59K4500XL	OFF
594-14				CMD	PVD	R	PB	VENT	6	CLOSE	CMD	1B		V59K4501XL	OFF
594-15				CMD	PVD	R	PB	VENT	6	CLOSE	CMD	2A		V59K4510XL	OFF
594-16				CMD	PVD	R	PB	VENT	6	CLOSE	CMD	2B		V59K4511XL	OFF
595-00				CMD	PVD	L	PB	VENT	5	CLOSE	CMD	OFF	\$	V59K3400XL	OFF
595-01				CMD	PVD	L	PB	VENT	5	CLOSE	CMD	1A		V59K3401XL	OFF
595-02				CMD	PVD	L	PB	VENT	5	CLOSE	CMD	2A		V59K3410XL	OFF
595-03				CMD	PVD	L	PB	VENT	5	CLOSE	CMD	2B		V59K3411XL	OFF
595-04				CMD	PVD	R	PB	VENT	5	CLOSE	CMD	1A		V59K4400XL	OFF
595-05				CMD	PVD	R	PB	VENT	5	CLOSE	CMD	1B		V59K4401XL	OFF



SEQ : TIME : J : FUNC : DISC : : NOMENCLATURE : : FUNCTION : : VALUE : : ELSE : : DURATION : : LCC : : S : :  
 : CD : T : S : :  
 : CLOCK : E : F : :  
 : D : :

595-06 CMD PVD R PB VENT 5 CLOSE CMD 2A V59K4410XL OFF  
 595-07 CMD PVD R PB VENT 5 CLOSE CMD 2B V59K4411XL OFF

\$ VENTS 1/2 PURGE CMD OFF \$  
 596-00 CMD PVD L FWD VENTS 1/2 PURGE CMD 1A V59K3100XL OFF  
 596-01 CMD PVD L FWD VENTS 1/2 PURGE CMD 1B V59K3101XL OFF  
 596-02 CMD PVD L FWD VENTS 1/2 PURGE CMD 2A V59K3110XL OFF  
 596-03 CMD PVD L FWD VENTS 1/2 PURGE CMD 2B V59K3111XL OFF  
 596-04 CMD PVD R FWD VENTS 1/2 PURGE CMD 1A V59K4100XL OFF  
 596-05 CMD PVD R FWD VENTS 1/2 PURGE CMD 1B V59K4101XL OFF  
 596-06 CMD PVD R FWD VENTS 1/2 PURGE CMD 2A V59K4110XL OFF  
 596-07 CMD PVD R FWD VENTS 1/2 PURGE CMD 2B V59K4111XL OFF

\$ VENTS 8/9 PURGE CMD OFF \$  
 597-00 CMD PVD L AFT VENTS 8/9 PURGE CMD 1A V59K3900XL OFF  
 597-01 CMD PVD L AFT VENTS 8/9 PURGE CMD 1B V59K3901XL OFF  
 597-02 CMD PVD L AFT VENTS 8/9 PURGE CMD 2A V59K3910XL OFF  
 597-03 CMD PVD L AFT VENTS 8/9 PURGE CMD 2B V59K3911XL OFF  
 597-04 CMD PVD R AFT VENTS 8/9 PURGE CMD 1A V59K4900XL OFF  
 597-05 CMD PVD R AFT VENTS 8/9 PURGE CMD 1B V59K4901XL OFF  
 597-06 CMD PVD R AFT VENTS 8/9 PURGE CMD 2A V59K4910XL OFF  
 597-07 CMD PVD R AFT VENTS 8/9 PURGE CMD 2B V59K4911XL OFF

\$ SS WATER SYSTEM SECURING \$  
 598-00 V CMD WATR SSW PRI MAIN VALVE OPEN CMD XWDKV821E OFF  
 598-01 V CMD WATR SSW SEC MAIN VALVE OPEN CMD XWDKVC21E OFF

598-02 V CMD WATR SSW PRI MAIN VALVE OPEN ENABLE CMD XWDKVC01E OFF  
 598-03 V CMD WATR SSW SEC MAIN VALVE OPEN ENABLE CMD XWDKVC11E OFF

\$ SS WATER SYSTEM SECURING \$  
 \$ PRE L/O VLVS VENT CMD \$  
 599-00 K CMD WATR SS PRE L/O VLVS VENT CMD GWDKPT36E OFF  
 599-01 K CMD WATR SS PRE L/O VLVS VENT CMD GWDKPT22E OFF  
 \$ PRE L/O VLVS OPEN CMD \$



DATE	TIME	CD	CLOCK	S	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE	
12-10-85								GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33					OMI S9005 - L		
603-03		VFY	BHYD	LH	EV	APU	PRI	SP	CON	VLV	OP	SYS	B46X1862X1	ON	DISPLAY
604-00		VFY	BHYD	LH	EVENT	APU	B	ISLN	VALVE	OPEN			B46X1852X1	OFF	DISPLAY
604-01		VFY	BHYD	LH	EVENT	APU	B	ISLN	VALVE	CLOSED			B46X1854X1	ON	DISPLAY
604-02		VFY	BHYD	LH	EV	APU	SEC	SP	CON	VLV	CLD	SYS	B46X1863X1	ON	DISPLAY
604-03		VFY	BHYD	LH	EV	APU	PRI	SP	CON	VLV	OP	SYS	B46X1864X1	ON	DISPLAY
605-00		VFY	BHYD	RH	EVENT	APU	A	ISLN	VALVE	OPEN			B46X2851X1	OFF	DISPLAY
605-01		VFY	BHYD	RH	EVENT	APU	A	ISLN	VALVE	CLOSED			B46X2853X1	ON	DISPLAY
605-02		VFY	BHYD	RH	EV	APU	SEC	SP	CON	VLV	CLD	SYS	B46X2861X1	ON	DISPLAY
605-03		VFY	BHYD	RH	EV	APU	PRI	SP	CON	VLV	OP	SYS	B46X2862X1	ON	DISPLAY
606-00		VFY	BHYD	RH	EVENT	APU	B	ISLN	VALVE	OPEN			B46X2852X1	OFF	DISPLAY
606-01		VFY	BHYD	RH	EVENT	APU	B	ISLN	VALVE	CLOSED			B46X2854X1	ON	DISPLAY
606-02		VFY	BHYD	RH	EV	APU	SEC	SP	CON	VLV	CLD	SYS	B46X2863X1	ON	DISPLAY
606-03		VFY	BHYD	RH	EV	APU	PRI	SP	CON	VLV	OP	SYS	B46X2864X1	ON	DISPLAY
607-00		VFY	PVD	L	FWD	VENTS	1/2	PURGE	IND	1			V59X3105X1	ON	DISPLAY
607-01		VFY	PVD	L	FWD	VENTS	1/2	PURGE	IND	2			V59X3115X1	ON	DISPLAY
607-02		VFY	PVD	R	FWD	VENTS	1/2	PURGE	IND	1			V59X4105X1	ON	DISPLAY
607-03		VFY	PVD	R	FWD	VENTS	1/2	PURGE	IND	2			V59X4115X1	ON	DISPLAY
608-00		VFY	PVD	L	PB	VENT	3	CLOSED	1				V59X3205X1	ON	DISPLAY
608-01		VFY	PVD	L	PB	VENT	3	CLOSED	2				V59X3215X1	ON	DISPLAY
608-02		VFY	PVD	R	PB	VENT	3	CLOSED	1				V59X4205X1	ON	DISPLAY
608-03		VFY	PVD	R	PB	VENT	3	CLOSED	2				V59X4215X1	ON	DISPLAY
609-00		VFY	PVD	L	PB	VENT	5	CLOSED	1				V59X3405X1	ON	DISPLAY
609-01		VFY	PVD	L	PB	VENT	5	CLOSED	2				V59X3415X1	ON	DISPLAY
609-02		VFY	PVD	R	PB	VENT	5	CLOSED	1				V59X4405X1	ON	DISPLAY
609-03		VFY	PVD	R	PB	VENT	5	CLOSED	2				V59X4415X1	ON	DISPLAY
610-00		VFY	PVD	L	PB/W	VENT	4/7	CLOSED	1				V59X3305X1	ON	DISPLAY
610-01		VFY	PVD	L	PB/W	VENT	4/7	CLOSED	2				V59X3315X1	ON	DISPLAY
610-02		VFY	PVD	R	PB/W	VENT	4/7	CLOSED	1				V59X4305X1	ON	DISPLAY
610-03		VFY	PVD	R	PB/W	VENT	4/7	CLOSED	2				V59X4315X1	ON	DISPLAY

DATE	TIME	CD	CLOCK	SEQ	TIME	CD	CLOCK	FUNCTION	DESCRIPTION	UNIT	VALUE	ELSE	DURATION	LCC	PAGE
GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33															
OMI S9005 - L															
611-00		VFY	PVD	L	PB	VENT	6	CLOSED	1	V59X3505X1	ON	DISPLAY			
611-01		VFY	PVD	L	PB	VENT	6	CLOSED	2	V59X3515X1	ON	DISPLAY			
611-02		VFY	PVD	R	PB	VENT	6	CLOSED	1	V59X4505X1	ON	DISPLAY			
611-03		VFY	PVD	R	PB	VENT	6	CLOSED	2	V59X4515X1	ON	DISPLAY			
612-00		VFY	PVD	L	AFT	VENTS	8/9	PURGE IND	1	V59X3905X1	ON	DISPLAY			
612-01		VFY	PVD	L	AFT	VENTS	8/9	PURGE IND	2	V59X3915X1	ON	DISPLAY			
612-02		VFY	PVD	R	AFT	VENTS	8/9	PURGE IND	1	V59X4905X1	ON	DISPLAY			
612-03		VFY	PVD	R	AFT	VENTS	8/9	PURGE IND	2	V59X4915X1	ON	DISPLAY			
613-00		VFY	TRS	ET	RSS	S/A	DVC	SAFE		T55X1869X1	ON	DISPLAY			
613-01		VFY	TRS	ET	RSS	S/A	DVC	ARMED		T55X1870X1	OFF	DISPLAY			
614-00		VFY	BPYR	LH	EVENT	IGN	S/A	DEVICE	SAFE	B55X1843X1	ON	DISPLAY			
614-01		VFY	BPYR	RH	EVENT	IGN	S/A	DEVICE	SAFE	B55X2843X1	ON	DISPLAY			
615-00		VFY	BPYR	LH	VOLTAGE	IGN	PIC	CAP	A	B55V1603C1	N0L0	1.5	V	DISPLAY	
615-01		VFY	BPYR	RH	VOLTAGE	IGN	PIC	CAP	A	B55V2603C1	N0L0	1.5	V	DISPLAY	
615-02		VFY	BPYR	LH	VOLTAGE	IGN	PIC	CAP	B	B55V1604C1	N0L0	1.5	V	DISPLAY	
615-03		VFY	BPYR	RH	VOLTAGE	IGN	PIC	CAP	B	B55V2604C1	N0L0	1.5	V	DISPLAY	
\$ MPS POST RSLs ABORT VERIFICATIONS \$															
616-00		VFY	INTG	LAUNCH	SEQUENCE	ABORT	FLAG			V90X8382X1	ON	GT0	ST465		
616-01		VFY	MPS	ET/ORB	R	IN	DISCON	P03	CLOSED	IND	V41X1420E1	ON	DISPLAY		
616-02		VFY	MPS	ME-1	L02	PREVLV	CLOSE	IND		V41X1135E1	ON	DISPLAY			
616-03		VFY	MPS	ME-1	LH2	PREVLV	CLOSE	IND		V41X1105E1	ON	DISPLAY			
616-04		VFY	MPS	ME-2	L02	PREVLV	CLOSE	IND		V41X1235E1	ON	DISPLAY			
616-05		VFY	MPS	ME-2	LH2	PREVLV	CLOSE	IND		V41X1205E1	ON	DISPLAY			
616-06		VFY	MPS	ME-3	L02	PREVLV	CLOSE	IND		V41X1335E1	ON	DISPLAY			
616-07		VFY	MPS	ME-3	LH2	PREVLV	CLOSE	IND		V41X1305E1	ON	DISPLAY			
616-08		VFY	MPS	L02	OVERBOARD	BLEED	VALVE	OPEN		V41X1587E1	ON	OR			
616-09		VFY	MPS	L02	ACC	RECIRC	VLV	1	CLOSED	V41X1818E1	ON	2 OF 2			
616-10		VFY	MPS	L02	ACC	RECIRC	VLV	2	CLOSED	V41X1828E1	ON	DISPLAY			
\$ VERIFY SSME OXIDIZER DOME PURGE \$															
\$ VERIFY SSME HPOTP INT SEAL PURGE \$															
617-00		VFY	SSME	MPENG	GN2	PRG	VNT	CLD	IND	GGNX1053E	ON	DISPLAY			



SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE	
:	:	:	:	:	:	:	:	:	:	:	
:	:	:	:	:	DESIGNATOR	SINGL	:	:	:	:	
:	:	:	:	:	:	:OR LO	HIGH	UNIT	:	:	
618-32		VFY	EPDC	SYS A ETVAS PIC CAP VOLTS	GMSV1311A	NOLO	1.5	V		DISPLAY	
618-33		VFY	EPDC	SYS A ETVAS PIC CAP RED VOLTS	GMSV3311A	NOLO	1.5	V		DISPLAY	
618-34		VFY	EPDC	SYS B ETVAS PIC CAP VOLTS	GMSV2311A	NOLO	1.5	V		DISPLAY	
618-35		VFY	EPDC	SYS B ETVAS PIC CAP RED VOLTS	GMSV4311A	NOLO	1.5	V		DISPLAY	
618-36		VFY	EPDC	SYS A LH2 TSM PIC CAP VOLTS	GMSV1309A	NOLO	1.5	V		DISPLAY	
618-37		VFY	EPDC	SYS A LH2 TSM PIC CAP RED VOLTS	GMSV3309A	NOLO	1.5	V		DISPLAY	
618-38		VFY	EPDC	SYS A L02 TSM PIC CAP VOLTS	GMSV1310A	NOLO	1.5	V		DISPLAY	
618-39		VFY	EPDC	SYS A L02 TSM PIC CAP RED VOLTS	GMSV3310A	NOLO	1.5	V		DISPLAY	
618-40		VFY	EPDC	SYS B LH2 TSM PIC CAP VOLTS	GMSV2309A	NOLO	1.5	V		DISPLAY	
618-41		VFY	EPDC	SYS B LH2 TSM PIC CAP RED VOLTS	GMSV4309A	NOLO	1.5	V		DISPLAY	
618-42		VFY	EPDC	SYS B L02 TSM PIC CAP VOLTS	GMSV2310A	NOLO	1.5	V		DISPLAY	
618-43		VFY	EPDC	SYS B L02 TSM PIC CAP RED VOLTS	GMSV4310A	NOLO	1.5	V		DISPLAY	
618-44		K	VFY	CEPDC RBUS SYSA PIC CAP VOLTS	GMSV5503A	NOLO	1.5	V		DISPLAY	
618-45		K	VFY	CEPDC RBUS SYSA PIC CAP RED VOLTS	GMSV7503A	NOLO	1.5	V		DISPLAY	
618-46		K	VFY	CEPDC RBUS SYSB PIC CAP VOLTS	GMSV6503A	NOLO	1.5	V		DISPLAY	
618-47		K	VFY	CEPDC RBUS SYSB PIC CAP RED VOLTS	GMSV8503A	NOLO	1.5	V		DISPLAY	
624-00	ST470	K	CMD	INTG	\$ OAA RECONFIGURATION \$						
624-01		K	VFY	ARMS	PRI FULLY EXTENDED SW					1 OF 4	
624-02		K	VFY	ARMS	PRI FULLY EXTENDED SW					1 OF 4	
624-03		K	VFY	ARMS	SEC FULLY EXTENDED SW					1 OF 4	
624-04		K	VFY	ARMS	SEC FULLY EXTENDED SW					GT0 ST470	
625-00		K	CMD	ARMS	OAA UNLOCK PRI EXT LOCK VLV						
625-01		K	CMD	ARMS	OAA UNLOCK PRI EXT LOCK VLV						
625-02		K	CMD	ARMS	OAA UNLOCK SEC EXT LOCK VLV						
625-03		K	CMD	ARMS	OAA UNLOCK SEC EXT LOCK VLV						
626-00		K	CMD	ARMS	OAA LOCK PRI EXT LOCK VLV						
626-01		K	CMD	ARMS	OAA LOCK PRI EXT LOCK VLV						
626-02		K	CMD	ARMS	OAA LOCK SEC EXT LOCK VLV						
626-03		K	CMD	ARMS	OAA LOCK SEC EXT LOCK VLV						
627-00		K	CMD	ARMS	OAA PRI OPEN EXT PILOT VLV						
627-01		K	CMD	ARMS	OAA PRI OPEN EXT PILOT VLV						
627-02		K	CMD	ARMS	OAA SEC OPEN EXT PILOT VLV						
627-03		K	CMD	ARMS	OAA SEC OPEN EXT PILOT VLV						

: SEQ : TIME : I : FUNC : DISC : : NOMENCLATURE : : FUNCTION : : ELSE : : DURATION : : LCC : : S : :  
: CD : T : : : : : : : : : : : : : : : : S : :  
: CLOCK : E : : : : : : : : : : : : : : : : F : :  
: D : :

628-00	K	CMD	ARMS	OAA	PRI	RESET	EXT	PILOT	VLV							GS AK7160E	ON				
628-01	K	CMD	ARMS	OAA	PRI	RESET	EXT	PILOT	VLV							GS AK7165E	ON				
628-02	K	CMD	ARMS	OAA	SEC	RESET	EXT	PILOT	VLV							GS AK7180E	ON				
628-03	K	CMD	ARMS	OAA	SEC	RESET	EXT	PILOT	VLV							GS AK7185E	ON				
629-00										\$ DELAY 1 SEC \$											
629-01	K	CMD	ARMS	OAA	LOCK	PRI	EXT	LOCK	VLV							GS AK7130E	OFF				
629-02	K	CMD	ARMS	OAA	LOCK	PRI	EXT	LOCK	VLV							GS AK7135E	OFF				
629-03	K	CMD	ARMS	OAA	LOCK	SEC	EXT	LOCK	VLV							GS AK7150E	OFF				
629-04	K	CMD	ARMS	OAA	LOCK	SEC	EXT	LOCK	VLV							GS AK7155E	OFF				
630-00	K	CMD	ARMS	OAA	PRI	RESET	EXT	PILOT	VLV							GS AK7160E	OFF				
630-01	K	CMD	ARMS	OAA	PRI	RESET	EXT	PILOT	VLV							GS AK7165E	OFF				
630-02	K	CMD	ARMS	OAA	SEC	RESET	EXT	PILOT	VLV							GS AK7180E	OFF				
630-03	K	CMD	ARMS	OAA	SEC	RESET	EXT	PILOT	VLV							GS AK7185E	OFF				
630-04	K	CMD	ARMS	OAA	CLOSE	PRI	RETRACT	SUP	VLV							GS AK7200E	OFF				
630-05	K	CMD	ARMS	OAA	CLOSE	PRI	RETRACT	SUP	VLV							GS AK7205E	OFF				
630-06	K	CMD	ARMS	OAA	CLOSE	PRI	RETRACT	RET	VLV							GS AK7220E	OFF				
630-07	K	CMD	ARMS	OAA	CLOSE	PRI	RETRACT	RET	VLV							GS AK7225E	OFF				
630-08	K	CMD	ARMS	OAA	CLOSE	PRI	RETRACT	SUP	VLV							GS AK7240E	OFF				
630-09	K	CMD	ARMS	OAA	CLOSE	PRI	RETRACT	SUP	VLV							GS AK7245E	OFF				
630-10	K	CMD	ARMS	OAA	CLOSE	PRI	RETRACT	RET	VLV							GS AK7260E	OFF				
630-11	K	CMD	ARMS	OAA	CLOSE	PRI	RETRACT	RET	VLV							GS AK7265E	OFF				

631-00	ST480	K	VFY	ARMS	OAA	ACCUM	LEVEL	SW	NO.1	NORMAL											4 OF 4	
631-01		K	VFY	ARMS	OAA	ACCUM	LEVEL	SW	NO.2	NORMAL												4 OF 4
631-02		K	VFY	ARMS	OAA	ACCUM	LEVEL	SW	NO.3	NORMAL												4 OF 4
631-03		K	VFY	ARMS	OAA	ACCUM	LEVEL	SW	NO.4	NORMAL												OR
631-04		K	VFY	ARMS	OAA	ACCUM	LEVEL	SW	NO.1	NORMAL												4 OF 4
631-05		K	VFY	ARMS	OAA	ACCUM	LEVEL	SW	NO.2	NORMAL												4 OF 4
631-06		K	VFY	ARMS	OAA	ACCUM	LEVEL	SW	NO.3	NORMAL												4 OF 4
631-07		K	VFY	ARMS	OAA	ACCUM	LEVEL	SW	NO.4	NORMAL												GTO ST480

632-00		K	CMD	ARMS	OAA	OPEN	ACCUM	CHARGING														
632-01		K	CMD	ARMS	OAA	OPEN	ACCUM	CHARGING														
632-02		K	CMD	ARMS	OAA	CLOSE	GN2	INHIBIT	V													
632-03		K	CMD	ARMS	OAA	CLOSE	GN2	INHIBIT	V													
633-00	ST490	V	CMD	INTG	\$	DELAY	1	SEC	\$													

GROUND LAUNCH SEQUENCE DESCRIPTION - LCD STS 33

OMI S90C5 - L

DATE 12 35

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE	S	T	E	UNIT	F	D
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633-01	V	VFY	ARMS	CCAA POSITION INDICATOR		XEGPV809A	63.5	NOHI	FT		1	OF	3				
633-02	V	VFY	ARMS	B FORWARD STOP LIMIT IND		XEGXVB33E	ON				1	OF	3				
633-03	V	VFY	ARMS	A FORWARD STOP LIMIT IND		XEGXVC43E	ON										

633-04	V	CMD	ARMS	B EMERGENCY EXTEND CMD		XEGKVB31E	OFF										
633-05	V	CMD	ARMS	A EMERGENCY EXTEND CMD		XEGKVC31E	OFF										

633-06	V	CMD	ARMS	B EMERGENCY EXTEND ENABLE CMD		XEGKVB21E	OFF										
633-07	V	CMD	ARMS	A EMERGENCY EXTEND ENABLE CMD		XEGKVC21E	OFF										

633-08	V	VFY	ARMS	B EMERGENCY EXTEND ENABLE IND		XEGXVB23E	OFF									DISPLAY	
633-09	V	VFY	ARMS	A EMERGENCY EXTEND ENABLE IND		XEGXVC23E	OFF									DISPLAY	
633-10	V	CMD	ARMS	A REMOTE POWER CONTROL		XEGKVP01E	OFF										
633-11	V	CMD	ARMS	B REMOTE POWER CONTROL		XEGKVP11E	OFF										

634-00	CMD	INTG		\$ SAFING COMPLETE INTERRUPT TO ALL EXCEPT L02/LH2 \$													
				GLS SAFING COMPLETE													





DATE	TIME	CD	CLOCK	SEQ	S	I	F	TIME	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE	OMI	ST
12 05																	9005	33
GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS																		
653-01				ISSU	BRS					MEC1 RH RSS SAFE 2 (ISSUE FD)								
\$ DELAY 1 SECOND \$																		
653-02				ISSU	BRS					MEC2 LH RSS SAFE 2 (ISSUE FD)								
653-03				ISSU	BRS					MEC2 RH RSS SAFE 1 (ISSUE FD)								
\$ DELAY 1 SECOND \$																		
\$ DISABLE MEC CRITICAL CMD'S \$																		
654-00	ST520			CMD	BRS					RETRY NEXT SEQ NO MORE THAN ONCE								
ITEM 26 EXECUTE DEU 1																		
\$ DELAY 2 SECONDS \$																		
655-00				VFY	BRS					VERIFY MEC CRITICAL CMD'S ARE DISABLED								
MEC INHB/ENABLE IND V91X1491XX OFF																		
\$ PRINT MSG IF FAILED AFTER RETRY \$																		
656-00				CMD	BRS					RESUME								
656-01				CMD	BRS					READ MEC PREFLIGHT BITE								
656-02				CMD	BRS					READ MEC PREFLIGHT BITE								
656-03				CMD	BRS					MEC MASTER RESET								
656-04				CMD	BRS					MEC MASTER RESET								
657-00	ST530			VFY	BRS					LH RSS S/A DEVICE ARMED IND								
657-01				VFY	BRS					RH RSS S/A DEVICE ARMED IND								
657-02				VFY	BRS					LH RSS S/A DEVICE SAFED IND								
657-03				VFY	BRS					RH RSS S/A DEVICE SAFED IND								
\$ POST G901 RECYCLE OPERATIONS COMPLETE \$																		

DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S9005 - L :

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE	S
:	:	CD	T	:	:	DESIGNATOR	SINGL	:	:	:	:	S
:	:	CLOCK	E	:	:	OR LO	HIGH	:	:	:	:	F
:	:	:	:	:	:	:	:	:	:	:	:	D

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CONTINGENT PROGRAMS





DATE 12-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S9005 - L

SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
701-00				\$ 6001 R/S HOLD INDICATION LOOK-UP \$						
				LABL INTG						
				G001						
				\$ DELAY 10 SECONDS \$						
701-01	VFY	DPS		FA1 INPUT PROM SEQ3-10 BYPASS(HF)	V91X2806XX OFF				DISPLAY	
701-02	VFY	DPS		FA2 INPUT PROM SEQ3-10 BYPASS(HF)	V91X2807XX OFF				DISPLAY	
701-03	VFY	DPS		FA3 INPUT PROM SEQ3-10 BYPASS(HF)	V91X2808XX OFF				DISPLAY	
701-04	VFY	DPS		FA4 INPUT PROM SEQ3-10 BYPASS(HF)	V91X2809XX OFF				DISPLAY	
701-05	VFY	DPS		FF1 MDM RETURN WORD BYPASS(HFE)	V91X2904XX OFF				DISPLAY	
701-06	VFY	DPS		FF2 MDM RETURN WORD BYPASS(HFE)	V91X2905XX OFF				DISPLAY	
701-07	VFY	DPS		FF3 MDM RETURN WORD BYPASS(HFE)	V91X2906XX OFF				DISPLAY	
701-08	VFY	DPS		FF4 MDM RETURN WORD BYPASS(HFE)	V91X2907XX OFF				DISPLAY	
701-09	VFY	DPS		FLT-CRITICAL MDM HOLD/ABORT	V90X8767X1 OFF				DISPLAY	
701-10	VFY	EPDC		LH IGN PIC CAP A HOLD	V90X8383X1 OFF				DISPLAY	
701-11	VFY	EPDC		RH IGN PIC CAP A HOLD	V90X8385X1 OFF				DISPLAY	
701-12	VFY	EPDC		LH IGN PIC CAP B HOLD	V90X8384X1 OFF				DISPLAY	
701-13	VFY	EPDC		RH IGN PIC CAP B HOLD	V90X8386X1 OFF				DISPLAY	
701-14	VFY	MPS		MPS LH2 OUTBD FILL VLV HOLD	V90X8390X1 OFF				DISPLAY	
701-15	VFY	MPS		MPS LOX OUTBD FILL VLV HOLD	V90X8391X1 OFF				DISPLAY	
701-16	VFY	MPS		MPS LOX ACC RECIRC VLV HOLD	V90X8392X1 OFF				DISPLAY	
701-17	VFY	MPS		MPS L02 OVBD B/V CLOSE HOLD	V90X8399X1 OFF				DISPLAY	
701-18	VFY	MPS		MPS E1 H2 PREVLV OPEN HOLD	V90X8396X1 OFF				DISPLAY	
701-19	VFY	MPS		MPS E2 H2 PREVLV OPEN HOLD	V90X8397X1 OFF				DISPLAY	
701-20	VFY	MPS		MPS E3 H2 PREVLV OPEN HOLD	V90X8398X1 OFF				DISPLAY	
701-21	VFY	MPS		MPS VLV POS COMM FAULT HOLD	V90X8769X1 OFF				DISPLAY	
701-22	VFY	SSME		ME1 PAD DATA PATH FAIL HOLD	V90X8670X1 OFF				DISPLAY	
701-23	VFY	SSME		ME2 PAD DATA PATH FAIL HOLD	V90X8671X1 OFF				DISPLAY	
701-24	VFY	SSME		ME3 PAD DATA PATH FAIL HOLD	V90X8672X1 OFF				DISPLAY	
701-25	VFY	SSME		ME1 CONTROL FAIL HOLD	V90X8679X1 ON				GT0 ST10	
701-26	VFY	SSME		\$ ME-1 ELECTRONIC LOCKUP \$						
				ME-1 OPERATING MODE						
				E41J1513B1 B010	B100					
										2 OF 2



DATE	TIME	CD	CLOCK	SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE	OMI
12 35									GROUND LAUNCH SEQUENCE DESCRIPTION							S9005
									DOCUMENT - LCD STS 33							
701-41				VFY	SSME	ME-3	PHASE IN EFFECT		E41J3512B1	B010	B101		GTO	ST21		
				MSG			ME-3	CONTROLLER ELECTRONIC LOCKUP								
701-42	ST21			VFY	SSME	ME-3	HYDRAULIC LOCKUP \$		E41J3513B1	B011	B101		2	OF	2	
701-43				VFY	SSME	ME-3	PHASE IN EFFECT		E41J3512B1	B010	B101		GTO	ST22		
				MSG			ME-3	CONTROLLER ELECTRONIC LOCKUP								
701-44	ST22			VFY	SSME	ME-3	MAJOR COMPONENT FAIL \$		E41J3514B1	B001	B011		GTO	ST30		
				MSG			ME-3	CONTROLLER MAJOR COMPONENT FAIL								
701-45				VFY	SSME	ME-3	CONTROLLER CHANNEL FAIL \$		E41J3509B1	B000			DISPLAY			
				MSG			ME-3	CHANNEL STATUS P3R4-6								
701-46	ST30			VFY	INTG	LPS	GO FOR AUTO SEQ START HOLD		V90X8393X1	OFF			DISPLAY			PL
701-47				VFY	INTG	R/S	SEQ SSME GO FOR LAUNCH HOLD		V90X8395X1	OFF			DISPLAY			
701-48				VFY	INTG	LPS	GO FOR ENGINE START HOLD		V9CX8394X1	OFF			DISPLAY			PL
701-49				VFY	INTG	LPS	COUNTDOWN HOLD		V90X8768X1	OFF			DISPLAY			
701-50				VFY	INTG	VENT	DOOR POS HOLD		V90X8770X1	ON			GTO	ST35		
				MSG			VENT	DOOR POSITION HOLD								
701-51				VFY	INTG	ORBITER	VENT DOORS STATUS WORD		V90J8201C1	INTAME1	STORE					
701-52				VFY	INTG	LPS	ORBITER VENT DOORS OVRD WORD		V99J8836C1	INTAME2	STORE					
701-53				VFY	INTG	COMPUTE	NAME1 OR NAME2		INTNAME	XFFFF	XFFF0		DISPLAY			
701-54	ST35			VFY	INTG	LAUNCH	SEQUENCE ABORT		V90X8382X1	ON			GTO	ST40		
				MSG			LAUNCH	SEQUENCE ABORT								
701-55				VFY	FCL	MPS	ENG 1P ACTR A FAIL		V79X1170X1	OFF			DISPLAY			
701-56				VFY	FCL	MPS	ENG 1Y ACTR A FAIL		V79X1171X1	OFF			DISPLAY			
701-57				VFY	FCL	MPS	ENG 1P ACTR B FAIL		V79X1173X1	OFF			DISPLAY			
701-58				VFY	FCL	MPS	ENG 1Y ACTR B FAIL		V79X1174X1	OFF			DISPLAY			
701-59				VFY	FCL	MPS	ENG 1P ACTR C FAIL		V79X1176X1	OFF			DISPLAY			
701-60				VFY	FCL	MPS	ENG 1Y ACTR C FAIL		V79X1177X1	OFF			DISPLAY			
701-61				VFY	FCL	MPS	ENG 1P ACTR D FAIL		V79X1178X1	OFF			DISPLAY			
701-62				VFY	FCL	MPS	ENG 1Y ACTR D FAIL		V79X1179X1	OFF			DISPLAY			
701-63				VFY	FCL	MPS	ENG 2P ACTR A FAIL		V79X1270X1	OFF			DISPLAY			
701-64				VFY	FCL	MPS	ENG 2Y ACTR A FAIL		V79X1271X1	OFF			DISPLAY			
701-65				VFY	FCL	MPS	ENG 2P ACTR B FAIL		V79X1273X1	OFF			DISPLAY			



SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
:	CD	T	:	:	DESIGNATOR	SINGL	:	:	PAGE	:
:	CLOCK	E	:	:	OR LO	HIGH	UNIT	:	:	F
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701-66	VFY	FCL	MPS	ENG 2Y	ACTR B	FAIL	V79X1274X1	OFF	DISPLAY	
701-67	VFY	FCL	MPS	ENG 2P	ACTR C	FAIL	V79X1276X1	OFF	DISPLAY	
701-68	VFY	FCL	MPS	ENG 2Y	ACTR C	FAIL	V79X1277X1	OFF	DISPLAY	
701-69	VFY	FCL	MPS	ENG 2P	ACTR D	FAIL	V79X1278X1	OFF	DISPLAY	
701-70	VFY	FCL	MPS	ENG 2Y	ACTR D	FAIL	V79X1279X1	OFF	DISPLAY	
701-71	VFY	FCL	MPS	ENG 3P	ACTR A	FAIL	V79X1370X1	OFF	DISPLAY	
701-72	VFY	FCL	MPS	ENG 3Y	ACTR A	FAIL	V79X1371X1	OFF	DISPLAY	
701-73	VFY	FCL	MPS	ENG 3P	ACTR B	FAIL	V79X1373X1	OFF	DISPLAY	
701-74	VFY	FCL	MPS	ENG 3Y	ACTR B	FAIL	V79X1374X1	OFF	DISPLAY	
701-75	VFY	FCL	MPS	ENG 3P	ACTR C	FAIL	V79X1376X1	OFF	DISPLAY	
701-76	VFY	FCL	MPS	ENG 3Y	ACTR C	FAIL	V79X1377X1	OFF	DISPLAY	
701-77	VFY	FCL	MPS	ENG 3P	ACTR D	FAIL	V79X1378X1	OFF	DISPLAY	
701-78	VFY	FCL	MPS	ENG 3Y	ACTR D	FAIL	V79X1379X1	OFF	DISPLAY	
701-79	VFY	SSME	ENG1	SELF	TEST	STATUS	E41J1514B1	B01	DISPLAY	
701-80	VFY	SSME	ENG2	SELF	TEST	STATUS	E41J2514B1	B01	DISPLAY	
701-81	VFY	SSME	ENG3	SELF	TEST	STATUS	E41J3514B1	B01	DISPLAY	
701-82	VFY	SSME	ENG	SHUTDOWN	VERIFICATION	HOLD	V90X8389X1	OFF	DISPLAY	
701-83	VFY	SSME	UNCOMMANDED	ENG	SHUTDOWN	ABORT	V90X8771X1	OFF	DISPLAY	
701-84	VFY	SSME	MPS	ACT	PORT	COMM	FAULT	ABORT	DISPLAY	
701-85	VFY	SSME	ME-1	LOW	CHAMBER	PRESS	ABORT	ABORT	DISPLAY	
701-86	VFY	SSME	ME-2	LOW	CHAMBER	PRESS	ABORT	ABORT	DISPLAY	
701-87	VFY	SSME	ME-3	LOW	CHAMBER	PRESS	ABORT	ABORT	DISPLAY	
701-88	VFY	SSME	ME-1	ACT	PORT	FAIL	ABORT	ABORT	DISPLAY	
701-89	VFY	SSME	ME-2	ACT	PORT	FAIL	ABORT	ABORT	DISPLAY	
701-90	VFY	SSME	ME-3	ACT	PORT	FAIL	ABORT	ABORT	DISPLAY	

701-91 ST40 : END G001

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: DATE 12 : GROUND LAUNCH SEQUENCE DESCRIPTOR : LCC STS 33 : OMI S9005 - :
: : : : : : : : : : : : : : : :
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\$ IN THE EVENT OF A POST-ABORT ENGINE LH2 INLET PRESSURE GREATER THAN 90 PSIA GLS WILL REMOVE THE ENGINE LH2 PREVALVE CLOSE COMMANDS IN AN ATTEMPT TO DECREASE PRESSURE (REF. G002,3,4). A CONTINUED OVER PRESSURE CONDITION WILL REQUIRE LH2 PREVALVE OPENING AT THE DISCRETION OF THE RESPONSIBLE MPS ENGINEER. \$

```

702-00 LABL INTG $ G002 ENG 1 LH2 INLET PRESSURE RELIEF $
702-01 CMD MPS G002
702-02 CMD MPS MPS E-1 LH2 PREVALVE CLOSE CMD A V41K1122XL OFF
702-03 CMD MPS MPS E-1 LH2 PREVALVE CLOSE CMD B V41K1123XL OFF
702-04 CMD MPS MPS E-1 LH2 PREVALVE CLOSE CMD C V41K1124XL OFF
702-05 OMSG INTG E-1 LH2 INLET OVERPRESS - G002 EXECUTED
702-06 END G002

```

```

703-00 LABL INTG $ G003 ENG 2 LH2 INLET PRESSURE RELIEF $
703-01 CMD MPS G003
703-02 CMD MPS MPS E-2 LH2 PREVALVE CLOSE CMD A V41K1222XL OFF
703-03 CMD MPS MPS E-2 LH2 PREVALVE CLOSE CMD B V41K1223XL OFF
703-04 CMD MPS MPS E-2 LH2 PREVALVE CLOSE CMD C V41K1224XL OFF
703-05 OMSG INTG E-2 LH2 INLET OVERPRESS - G003 EXECUTED
703-06 END G003

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704-00 LABL INTG $ G004 ENG 3 LH2 INLET PRESSURE RELIEF $
704-01 CMD MPS G004
704-02 CMD MPS MPS E-3 LH2 PREVALVE CLOSE CMD A V41K1322XL OFF
704-03 CMD MPS MPS E-3 LH2 PREVALVE CLOSE CMD B V41K1323XL OFF
704-04 CMD MPS MPS E-3 LH2 PREVALVE CLOSE CMD C V41K1324XL OFF
704-05 OMSG INTG E-3 LH2 INLET OVERPRESS - G004 EXECUTED
704-06 END G004

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DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S9005 - L :

SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
:	:	:	:	:	:	:	:	:	:	:
:	CD	:	:	:	DESIGNATOR	SINGL	:	:	PAGE	S
:	CLOCK	:	:	:	OR	LO	HIGH	UNIT	:	F
:	:	:	:	:	:	:	:	:	:	D

704-05 END G004

705-00 \$ G005 BFS MTU ACCUMULATOR DETECTION \$ G005

LBL INTG	VFY	DPS	MTU ACCUMULATOR SOURCE	B011	INHB	MSEQ	END	G005
705-01	VFY	DPS	MTU ACCUMULATOR SOURCE	B011	INHB	MSEQ	END	G005
705-02	CVFY	DPS	MTU ACCUMULATOR SOURCE	B011	CPER	G005	TIL	MSEQ
705-03	END	G005						

706-00 \$ G006 REPLACE FAILED ET LH2 PRESS NO. 1 \$ G006

LBL INTG	VFY	LH2	REPLACE	LH2	ULLAGE	PRESS	N01	XDC	N41K1700X	OFF	DISPLAY	GTO	ST10
706-01	VFY	LH2	REPLACE	LH2	ULLAGE	PRESS	N01	XDC	N41K1700X	OFF	DISPLAY	GTO	ST10
706-02	VFY	LH2	REPLACE	LH2	ULLAGE	PRESS	N02	XDC	N41K1701X	OFF	DISPLAY	GTO	ST10
706-03	VFY	LH2	REPLACE	LH2	ULLAGE	PRESS	N03	XDC	N41K1702X	OFF	DISPLAY	GTO	ST10
706-04	CMD	LH2	REPLACE	LH2	ULLAGE	PRESS	N01	XDC	V41K1700XL	ON			
706-05	CMD	LH2	REPLACE	LH2	ULLAGE	PRESS	N01	XDC	N41K1700X	ON			

706-06 \$ DELAY .5 SEC \$

706-06 ST10 VFY INTG \$ MAINLINE HAS NOT PROGRESSED PAST MSEQ \$ GTO ST11

ST10	VFY	INTG	\$	3	OF	3	ULLAGE	PRESS	XDCRS	REQD	\$		
706-07	CVFY	LH2	ET	LH2	ULLAGE	PRESS	N0.1	T41P1700C1	40.9	44.1	PSIA	INHB	MSEQ
706-08	CVFY	LH2	ET	LH2	ULLAGE	PRESS	N0.2	T41P1701C1	40.9	44.1	PSIA	INHB	MSEQ
706-09	CVFY	LH2	ET	LH2	ULLAGE	PRESS	N0.3	T41P1702C1	40.9	44.1	PSIA	INHB	MSEQ

706-10 GTO ST12

706-10 ST11 VFY INTG \$ MAINLINE HAS NOT PROGRESSED PAST MENG \$ GTO ST12

ST11	VFY	INTG	\$	2	OF	3	ULLAGE	PRESS	XDCRS	REQD	\$			
706-11	CVFY	LH2	ET	LH2	ULLAGE	PRESS	N0.1	T41P1700C1	40.9	44.1	PSIA	2	OF	3
706-12	CVFY	LH2	ET	LH2	ULLAGE	PRESS	N0.2	T41P1701C1	40.9	44.1	PSIA	2	OF	3
706-13	CVFY	LH2	ET	LH2	ULLAGE	PRESS	N0.3	T41P1702C1	40.9	44.1	PSIA	EXIT	TIL	MENG

706-14 END G006

706-14 ST12 \$ G007 REPLACE FAILED ET LH2 PRESS NO.2 \$

GROUND LAUNCH SEQUENCE DESCRIPTION - LCD STS 33

OMI S90C5

SEQ	TIME	FUNC:DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	:S:
:	:	:	:	:DESIGNATOR:	:SINGL:	:	:	:S:
:	:CD	:T	:	:	:	:	:	:S:
:	:CLOCK	:E	:	:OR LO:	:HIGH	: UNIT	:	:F:
:	:	:	:	:	:	:	:	:D:
:	:	:	:	:	:	:	:	:

```

707-00      LABL INTG      G007
707-01      VFY LH2        REPLACE LH2 ULLAGE PRESS N01 XDC    N41K1700X OFF        DISPLAY GTO ST10
707-02      VFY LH2        REPLACE LH2 ULLAGE PRESS N02 XDC    N41K1701X OFF        DISPLAY GTO ST10
707-03      VFY LH2        REPLACE LH2 ULLAGE PRESS N03 XDC    N41K1702X OFF        DISPLAY GTO ST10
707-04      CMD LH2        REPLACE LH2 ULLAGE PRESS N02 XDC    V41K1701XL ON
707-05      CMD LH2        REPLACE LH2 ULLAGE PRESS N02 XDC    N41K1701X ON

```

```

707-06      ST10         VFY INTG      $ DELAY .5 SEC $
$ MAINLINE HAS NOT PROGRESSED PAST MSEQ $
$ 3 OF 3 ULLAGE PRESS XDCRS REQD $           GTO ST11

```

```

707-07      CVFY LH2        ET LH2 ULLAGE PRESS N0.1          T41P1700C1 40.9      PSIA  INHB MSEQ
707-08      CVFY LH2        ET LH2 ULLAGE PRESS N0.2          T41P1701C1 40.9      PSIA  INHB MSEQ
707-09      CVFY LH2        ET LH2 ULLAGE PRESS N0.3          T41P1702C1 40.9      PSIA  INHB MSEQ

```

```

707-10      ST11         VFY INTG      $ MAINLINE HAS NOT PROGRESSED PAST MENG $
$ 2 OF 3 ULLAGE PRESS XDCRS REQD $           GTO ST12
707-11      CVFY LH2        ET LH2 ULLAGE PRESS N0.1          T41P1700C1 40.9      PSIA  2 OF 3
707-12      CVFY LH2        ET LH2 ULLAGE PRESS N0.2          T41P1701C1 40.9      PSIA  2 OF 3
707-13      CVFY LH2        ET LH2 ULLAGE PRESS N0.3          T41P1702C1 40.9      PSIA  EXIT
707-14      ST12         END          G007

```

```

708-00      LABL INTG      G008
708-01      VFY LH2        REPLACE LH2 ULLAGE PRESS N01 XDC    N41K1700X OFF        DISPLAY GTO ST10
708-02      VFY LH2        REPLACE LH2 ULLAGE PRESS N02 XDC    N41K1701X OFF        DISPLAY GTO ST10
708-03      VFY LH2        REPLACE LH2 ULLAGE PRESS N03 XDC    N41K1702X OFF        DISPLAY GTO ST10
708-04      CMD LH2        REPLACE LH2 ULLAGE PRESS N03 XDC    V41K1702XL ON
708-05      CMD LH2        REPLACE LH2 ULLAGE PRESS N03 XDC    N41K1702X ON

```

```

708-06      ST10         VFY INTG      $ DELAY .5 SEC $
$ MAINLINE HAS NOT PROGRESSED PAST MSEQ $
$ 3 OF 3 ULLAGE PRESS XDCRS REQD $           GTO ST11

```

```

708-07      CVFY LH2        ET LH2 ULLAGE PRESS N0.1          T41P1700C1 40.9      PSIA  INHB MSEQ
708-08      CVFY LH2        ET LH2 ULLAGE PRESS N0.2          T41P1701C1 40.9      PSIA  INHB MSEQ
708-09      CVFY LH2        ET LH2 ULLAGE PRESS N0.3          T41P1702C1 40.9      PSIA  INHB MSEQ

```

SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
CD	ET			DESIGNATOR	SINGL				PAGE
CLOCK	E			OR	LO	HIGH	UNIT		

708-10 ST11 VFY INTG \$ MAINLINE HAS NOT PROGRESSED PAST MENG \$ GIO ST12  
 \$ 2 OF 3 ULLAGE PRESS XDCRS REQD \$

708-11 CVFY LH2 ET LH2 ULLAGE PRESS NO.1 44.1 PSIA 2 OF 3  
 708-12 CVFY LH2 ET LH2 ULLAGE PRESS NO.2 44.1 PSIA 2 OF 3  
 708-13 CVFY LH2 ET LH2 ULLAGE PRESS NO.3 44.1 PSIA EXIT TIL MENG  
 708-14 ST12 END G008

709-00 LABL INTG \$ G009 REPLACE FAILED ET L02 PRESS NO.1 \$  
 709-01 VFY L02 REPLACE L02 ULLAGE PRESS NO1 XDC 6009 DISPLAY GIO ST10  
 709-02 VFY L02 REPLACE L02 ULLAGE PRESS NO2 XDC N41K1751X OFF DISPLAY GIO ST10  
 709-03 VFY L02 REPLACE L02 ULLAGE PRESS NO3 XDC N41K1752X OFF DISPLAY GIO ST10  
 709-04 CMD L02 REPLACE L02 ULLAGE PRESS NO1 XDC V41K1750XL ON  
 709-05 CMD L02 REPLACE L02 ULLAGE PRESS NO1 XDC N41K1750X ON

709-06 ST10 VFY INTG \$ DELAY .5 SEC \$ GTO ST11  
 \$ 3 OF 3 ULLAGE PRESS XDCRS REQD \$

709-07 CVFY L02 ET L02 ULLAGE PRESSURE NO.1 T41P1750C1 19.3 22.5 PSIG INHB MSEQ  
 709-08 CVFY L02 ET L02 ULLAGE PRESSURE NO.2 T41P1751C1 19.3 22.5 PSIG INHB MSEQ  
 709-09 CVFY L02 ET L02 ULLAGE PRESSURE NO.3 T41P1752C1 19.3 22.5 PSIG INHB MSEQ  
 GTO ST12

709-10 ST11 VFY INTG \$ MAINLINE HAS NOT PROGRESSED PAST MENG \$ GTO ST12  
 \$ 2 OF 3 ULLAGE PRESS XDCRS REQD \$

709-11 CVFY L02 ET L02 ULLAGE PRESS NO.1 T41P1750C1 19.3 22.5 PSIG 2 OF 3  
 709-12 CVFY L02 ET L02 ULLAGE PRESS NO.2 T41P1751C1 19.3 22.5 PSIG 2 OF 3  
 709-13 CVFY L02 ET L02 ULLAGE PRESS NO.3 T41P1752C1 19.3 22.5 PSIG EXIT TIL MENG  
 709-14 ST12 END G009

710-00 LABL INTG \$ G010 REPLACE FAILED ET L02 PRESS NO.2 \$  
 710-01 VFY L02 REPLACE L02 ULLAGE PRESS NO1 XDC 6010 DISPLAY GIO ST10  
 710-02 VFY L02 REPLACE L02 ULLAGE PRESS NO2 XDC N41K1751X OFF DISPLAY GIO ST10  
 710-03 VFY L02 REPLACE L02 ULLAGE PRESS NO3 XDC N41K1752X OFF DISPLAY GIO ST10



DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S9005 - L :

SEQ	TIME	CD	CLOCK	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE	S
:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
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:	:	:	:	:	:	:	:	:	:	:	:	:	:	:

711-13 CVFY L02 ET L02 ULLAGE PRESS NO.3 T41P1752C1 19.3 22.5 PSIG EXIT TIL MENG  
711-14 ST12 END G011

85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 OMI S9005 - L

SEQ : TIME : I : FUNC : DISC : Nomenclature : Function : Value : Else : Duration : LCC : S : S :

CD : T : : : : : Designator : Singl : : : : : : : : : : : : : : S :

Clock : E : : : : : : OR LO : High : Unit : : : : : : : : : : : : : : F :

: D :

712-00 LABL INTG \$ G012 PASS FSM OR BFS GPC ERR \$ G012

712-01 VFY INTG DPS I/O FAILURE NO3IS168D DISPLAY 6.9.3-7

\$ GPC BITE (PASS) ERROR NO3IS168D 1 INHB MENG \$

\$ I/O ERROR CRT1 OR CRT3 NO3IS168D 2 INHB MSEQ \$

\$ GPC ERROR (BFS) NO3IS168D 500 INHB MSEQ \$

712-02 END G012

\*\*\*\*\*  
 \* THE FOLLOWING DPS ERROR ENCODE SEQUENCE DEPICTS \*  
 \* SOFTWARE USED TO ENCODE THE DPS I/O FAILURE FOR G012. PROGRAM DETAILS ARE \*  
 \* NOT SHOWN. THIS INCLUSION INTO THE GLSDD IS FOR INFORMATION ONLY AND MAY \*  
 \* NOT NECESSARILY SHOW PROPER PROGRAM FLOW. \*  
 \*\*\*\*\*

712-03 ST10 \$ BEGIN DPS ERROR ENCODE (INFO ONLY) \$

VFY DPS FSP MSG 1 MAJOR ID V92U7001CX 102 GT0 ST12

VFY DPS FSP MSG 1 MINOR ID V92U7003CX 48 GT0 ST12

GT0 ST100

712-05 ST12 VFY DPS FSP MSG 1 MAJOR ID V92U7001CX 103 GT0 ST20

712-06 VFY DPS FSP MSG 1 MINOR ID V92U7003CX 24 GT0 ST14

GT0 ST101

712-07 ST14 VFY DPS FSP MSG1 MINOR ID V92U7003CX 145 GT0 ST20

GT0 ST101

712-08 ST20 VFY DPS FSP MSG2 MAJOR ID V92U7016CX 102 GT0 ST22

712-09 VFY DPS FSP MSG2 MINOR ID V92U7018CX 48 GT0 ST22

GT0 ST100

712-10 ST22 VFY DPS FSP MSG2 MAJOR ID V92U7016CX 103 GT0 ST30

712-11 VFY DPS FSP MSG2 MINOR ID V92U7018CX 24 GT0 ST34

GT0 ST101

712-12 ST24 VFY DPS FSP MSG2 MINOR ID V92U7018CX 45 GT0 ST30

GT0 ST101

712-13 ST30 VFY DPS FSP MSG3 MAJOR ID V92U7030CX 102 GT0 ST32



SEQ	TIME	CD	CLOCK	S	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE	
712-14	VFY	DPS				FSP	MSG3	MINOR ID	V92U7032CX	48		GT0	SI32		
								GT0	ST100						
712-15	VFY	DPS				FSP	MSG3	MAJOR ID	V92U7030CX	103		GT0	ST40		
712-16	VFY	DPS				FSP	MSG3	MINOR ID	V92U7032CX	24		GT0	ST34		
								GT0	ST101						
712-17	VFY	DPS				FSP	MSG3	MINOR ID	V92U7032CX	45		GT0	ST40		
								GT0	ST101						
712-18	VFY	DPS				FSP	MSG4	MAJOR ID	V92U7045CX	102		GT0	ST42		
712-19	VFY	DPS				FSP	MSG4	MINOR ID	V92U7047CX	48		GT0	SI42		
								GT0	ST100						
712-20	VFY	DPS				FSP	MSG4	MAJOR ID	V92U7045CX	103		GT0	SI50		
712-21	VFY	DPS				FSP	MSG4	MINOR ID	V92U7047CX	24		GT0	ST54		
								GT0	ST101						
712-22	VFY	DPS				FSP	MSG4	MINOR ID	V92U7047CX	45		GT0	ST50		
								GT0	ST101						
712-23	VFY	DPS				FSP	MSG5	MAJOR ID	V92U7060CX	102		GT0	ST52		
712-24	VFY	DPS				FSP	MSG5	MINOR ID	V92U7062CX	48		GT0	SI52		
								GT0	ST100						
712-25	VFY	DPS				FSP	MSG5	MAJOR ID	V92U7060CX	103		GT0	SI60		
712-26	VFY	DPS				FSP	MSG5	MINOR ID	V92U7062CX	24		GT0	ST54		
								GT0	ST101						
712-27	VFY	DPS				FSP	MSG5	MINOR ID	V92U7062CX	45		GT0	ST60		
								GT0	ST101						
712-28	VFY	DPS				GPC	ERROR	LOG1-ERROR	CODE	BFS	NOTE	A	GT0	ST61	6.9.24-6
712-29	VFY	DPS				GPC	ERROR	LOG2-ERROR	CODE	BFS	NOTE	A	GT0	ST62	6.9.24-6
712-30	VFY	DPS				GPC	ERROR	LOG3-ERROR	CODE	BFS	NOTE	A	GT0	ST63	6.9.24-6
712-31	VFY	DPS				GPC	ERROR	LOG4-ERROR	CODE	BFS	NOTE	A	GT0	ST64	6.9.24-6



DATE	TIME	CD	CLOCK	SEQ	TIME	CD	CLOCK	FUNC	DISC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
12-10-85											GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33					OMI S9005 - L	
712-32											MAX RATE OVERLOAD						
											ALT RATE OVERLOAD						
											UNPROJECTED INSTR						
											WATCHDOG TIMEOUT						
											GPC FAIL						
											CONTROL MONITOR IDLE						
											IOP POS PARTLY						
											IOP FAULT						
											END NOTE A						
712-33	ST100	CMD	DPS		DPS		DPS		DPS		DPS I/O ERROR					N03IS168D	1
712-34		CMD	DPS		DPS		DPS		DPS		PASS FSM OR BFS GPC ERR					N039INTGR	ON
											GTO ST10						
712-35	ST101	CMD	DPS		DPS		DPS		DPS		DPS I/O ERROR					N03IS168D	2
712-36		CMD	DPS		DPS		DPS		DPS		PASS FSM OR BFS GPC ERR					N039INTGR	ON
											GTO ST10						
712-37	ST102	CMD	DPS		DPS		DPS		DPS		DPS I/O ERROR					N03IS168D	500
712-38		CMD	DPS		DPS		DPS		DPS		PASS FSM OR BFS GPC ERR					N039INTGR	ON
											GTO ST10						
712-39		END	DPS		DPS		DPS		DPS		ERROR ENCODE (INFO ONLY)						

SEQ : TIME : I : FUNC : DISC : NOMENCLATURE : FUNCTION : VALUE : ELSE : DURATION : LCC : PAGE :  
 : CD : T : : : : : : : : : : : : : :  
 : CLOCK : E : : : : : : : : : : : : : :  
 :  
 :  
 :  
 :

\$ G013 TERMINATE LOX REPLENISH \$

LABL	INTG	LOX	FLIGHT	MASS	G013	INHB	MPS4	PL
713-00	VFY	INTG	L02	LOX FLIGHT MASS	N03IS008E	ON	GTO	ST10
713-01	VFY	INTG	L02	GLS-GO FOR T-9 GLS START	M009	ON	GTO	ST10
713-02	VFY	INTG	L02	GLS-GO FOR OAA RETRACT	M00A	ON	GTO	ST10
713-03	VFY	INTG	L02	GLS-GO FOR APU START	MAPU	ON	GTO	ST10
713-04	VFY	INTG	L02	GLS-GO FOR PURGE SEQ.4	MPS4	ON	GTO	ST10
713-05	VFY	INTG	L02	GLS-GO ET L02 PRE-PRESSURIZATION	MLOX	ON	GTO	ST10
713-06	VFY	INTG	L02	GLS-GO FOR ET LH2 REPLN TERM	MLH2	ON	GTO	ST10
713-07	VFY	INTG	L02	GLS-GO FOR AUTO SEQ START	MSEQ	ON	GTO	ST10
713-08	VFY	INTG	L02	GLS-GO FOR SSME IGNITION	MENG	ON	GTO	ST10
713-09	VFY	INTG	L02	GLS-GO FOR SRB IGNITION	MSRB	ON	GTO	ST10
713-10	VFY	INTG	L02	GLS-NO LCC-1 FAILURES	LCC-1	ON	GTO	ST10
713-11	VFY	INTG	L02	GLS-NO LCC-2 FAILURES	LCC-2	ON	GTO	ST10
713-12	VFY	INTG	L02	GLS-NO LCC-3 FAILURES	LCC-3	ON	GTO	ST10
713-13	VFY	INTG	L02	GLS-NO LCC-4 FAILURES	LCC-4	ON	GTO	ST10
713-14	VFY	INTG	L02	MANUAL HOLD		ON	GTO	ST10
713-15	CMD	L02	GO FOR TERMINATE LOX REPLENISH	N007INTGR	ON		GTO	ST10
713-16	MSG	INTG	START TERM LOX RPL				GTO	ST10
713-17							GTO	ST10

\$\$ PROPELLANT S/W ISSUES L02 I/B FILL VLV CL CMD ON <V41K1512XL> \$\$  
 \$\$ PROPELLANT S/W ISSUES L02 I/B FILL VLV OP CMD A OFF <V41K1501XL> \$\$  
 \$\$ PROPELLANT S/W ISSUES L02 I/B FILL VLV OP CMD B OFF <V41K1502XL> \$\$

\$ DELAY 10 SECONDS \$

LABL	INTG	LOX	FLIGHT	MASS	G013	INHB	MPS4	PL
713-18	VFY	INTG	L02	LOX REPL TERMINATE IN PROGRESS	N03IS010E	ON	GTO	ST10
713-19	CMD	INTG	L02	LOX HOLD AVAILABLE TIMER ACTIV.	GCDKTM3E	ON		
713-20	END	G013						
713-21	MSG	INTG	ST10	SKIPPED LOX REPLENISH TERM				
713-22	END	G013						







DATE 12 5 : GROUND LAUNCH SEQUENCE DESCRIPTOR DOCUMENT - LCD STS 33

OMI S9005

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	UNIT
: :	: :	: :	: :	: :	: :	: :	: :	: :	: :	: :	: :
: :	: :	: :	: :	: :	: :	: :	: :	: :	: :	: :	: :
: :	: :	: :	: :	: :	: :	: :	: :	: :	: :	: :	: :

715-00	LABL	INTG			\$ G015 BACKUP CONSOLE CRASH \$							
715-01	VFY	INTG	GLS	MAINLINE CONSOLE	G015	NO3IS270D	2			GTO	ST11	
715-02	VFY	INTG	\$	MAINLINE RUNNING IN BACKUP CONSOLE \$								
715-03	VFY	INTG	\$	MAINLINE HAS NOT PROGRESSED PAST M009 \$								
	VFY	INTG	BACKUP TYPE II CONSOLE	GO MODE	SBKUPG0		ON			GTO	ST10	
											HOLD	I-9
					GTO							ST12
715-04	VFY	INTG	\$	MAINLINE IS PAST M009 \$								
	VFY	INTG	BACKUP TYPE II CONSOLE	GO MODE	SBKUPG0		ON					
					GTO							ST12
715-05	VFY	INTG	\$	BACKUP IS NOT MAINLINE CONSOLE \$								
715-06	END	G015	BACKUP TYPE II CONSOLE	GO MODE	SBKUPG0		ON			INHB	MSRB	

\$G016 INITIATE VLS SSME HEATSHIELD WATER - TBD\$

\$ G017 GO FOR CENTAUR PRESSURIZATION \$

\$ THIS CPER IS PERFORMED WHEN CDT = A TIME SPECIFIED DURING \$

\$ INITIALIZATION THAT MAY VARY BETWEEN T-1/35 AND T-1/05 \$

717-00	K	LABL	CINTG									
717-01	K	VFY	CINTG	MANUAL HOLD	G017	NO3IS048E	ON			GTO	ST10	
717-02	K	VFY	CINTG	TC HOLD/RESUME		NO3IS347D	0			GTO	ST10	
717-03	K	VFY	CINTG	MILESTONES			ON			GTO	ST10	
717-04	K	CMD	CINTG	GO FOR CCE PRESSURIZATION - PRI		GCKK3051E	ON				PL	
717-05	K	CMD	CINTG	GO FOR CCE PRESSURIZATION - SEC		GCKK3551E	ON				PL	
717-06	K	MSG	CINTG	CENTAUR PRESS CMD SENT								
											GTO	ST20

717-07 ST10 MSG INTG SKIPPED CENTAUR PRESS

717-08 ST20 END G017



SEQ	:	TIME	:	FUNC	:	DISC	:	NOMENCLATURE	:	FUNCTION	:	VALUE	:	ELSE	:	DURATION	:	LCC	:	PAGE	:
	:	CD	:	T	:		:		:	DESIGNATOR	:	SINGL	:		:		:		:		:
	:	CLOCK	:	E	:		:		:		:	OR LO	:	HIGH	:	UNIT	:		:		:

\*\*\*\*\*  
 \*  
 \* CONCURRENT PROGRAMS \*  
 \*

\$ P001 AERO-SURFACE PROFILE EVALUATION \$  
 P001

801-00 LABEL FCL

802-00 CMD FCL \$ START AERO-SURFACE PROFILE \$  
 INITIATE AERO-SURFACE DRIVE CHEC CMD-LS ON

LINE	CODE	DESCR	MOVEMENT	FROM	INITIAL	POSITION	FIRST	9	SECONDS	OF	PROFILE	\$	
803-00	VFY	FCL	L INBD	ELEVON	ACTR	CHAN 1	POSN	V58H0802A1	1	NOHI	DEG	1 OF 4	
803-01	VFY	FCL	L INBD	ELEVON	ACTR	CHAN 2	POSN	V58H0803A1	1	NOHI	DEG	1 OF 4	
803-02	VFY	FCL	L INBD	ELEVON	ACTR	CHAN 3	POSN	V58H0804A1	1	NOHI	DEG	1 OF 4	
803-03	VFY	FCL	L INBD	ELEVON	ACTR	CHAN 4	POSN	V58H0805A1	1	NOHI	DEG	INHB MSEQ	
803-04	VFY	FCL	L OUTBD	ELEVON	ACTR	CHAN 1	POSN	V58H0852A1	1	NOHI	DEG	1 OF 4	
803-05	VFY	FCL	L OUTBD	ELEVON	ACTR	CHAN 2	POSN	V58H0853A1	1	NOHI	DEG	1 OF 4	
803-06	VFY	FCL	L OUTBD	ELEVON	ACTR	CHAN 3	POSN	V58H0854A1	1	NOHI	DEG	1 OF 4	
803-07	VFY	FCL	L OUTBD	ELEVON	ACTR	CHAN 4	POSN	V58H0855A1	1	NOHI	DEG	INHB MSEQ	
803-08	VFY	FCL	R INBD	ELEVON	ACTR	CHAN 1	POSN	V58H0902A1	1	NOHI	DEG	1 OF 4	
803-09	VFY	FCL	R INBD	ELEVON	ACTR	CHAN 2	POSN	V58H0903A1	1	NOHI	DEG	1 OF 4	
803-10	VFY	FCL	R INBD	ELEVON	ACTR	CHAN 3	POSN	V58H0904A1	1	NOHI	DEG	1 OF 4	
803-11	VFY	FCL	R INBD	ELEVON	ACTR	CHAN 4	POSN	V58H0905A1	1	NOHI	DEG	INHB MSEQ	
803-12	VFY	FCL	R OUTBD	ELEVON	ACTR	CHAN 1	POSN	V58H0952A1	1	NOHI	DEG	1 OF 4	
803-13	VFY	FCL	R OUTBD	ELEVON	ACTR	CHAN 2	POSN	V58H0953A1	1	NOHI	DEG	1 OF 4	
803-14	VFY	FCL	R OUTBD	ELEVON	ACTR	CHAN 3	POSN	V58H0954A1	1	NOHI	DEG	1 OF 4	
803-15	VFY	FCL	R OUTBD	ELEVON	ACTR	CHAN 4	POSN	V58H0955A1	1	NOHI	DEG	INHB MSEQ	
803-16	VFY	FCL	RUDDER	ACTR	CHAN 1	POSN	V57H0150A1	1	NOHI	DEG	1 OF 4		
803-17	VFY	FCL	RUDDER	ACTR	CHAN 2	POSN	V57H0151A1	1	NOHI	DEG	1 OF 4		
803-18	VFY	FCL	RUDDER	ACTR	CHAN 3	POSN	V57H0152A1	1	NOHI	DEG	1 OF 4		
803-19	VFY	FCL	RUDDER	ACTR	CHAN 4	POSN	V57H0153A1	1	NOHI	DEG	INHB MSEQ		
803-20	VFY	FCL	SPEEDBRAKE	ACTR	CHAN 1	POSN	V57H0250A1	6	NOHI	DEG	1 OF 4		
803-21	VFY	FCL	SPEEDBRAKE	ACTR	CHAN 2	POSN	V57H0251A1	6	NOHI	DEG	1 OF 4		
803-22	VFY	FCL	SPEEDBRAKE	ACTR	CHAN 3	POSN	V57H0252A1	6	NOHI	DEG	1 OF 4		
803-23	VFY	FCL	SPEEDBRAKE	ACTR	CHAN 4	POSN	V57H0253A1	6	NOHI	DEG	INHB MSEQ		
803-24	VFY	FCL	SELECTED	BODY	FLAP	1.5	NOHI	DEG	V9CH6410CT	1.5	NOHI	DEG	INHB MSEQ

\$ AERO-SURFACE MOVEMENT - LAST 11 SECONDS OF PROFILE \$

SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
:	:	:	:	:	DESIGNATOR	SINGL	:	:	:	:
:	CD	:	:	:	:	:	:	:	:	:
:	CLOCK	:	:	:	OR	LO	HIGH	:	UNIT	:
804-00		VFY	FCL	L INBD ELEVON ACTR CHAN 1 POSN	V58H0802A1	N0L0	-1	DEG	1 OF 4	
804-01		VFY	FCL	L INBD ELEVON ACTR CHAN 2 POSN	V58H0803A1	N0L0	-1	DEG	1 OF 4	
804-02		VFY	FCL	L INBD ELEVON ACTR CHAN 3 POSN	V58H0804A1	N0L0	-1	DEG	1 OF 4	
804-03		VFY	FCL	L INBD ELEVON ACTR CHAN 4 POSN	V58H0805A1	N0L0	-1	DEG	INHB MSEQ	
804-04		VFY	FCL	L OUTBD ELEVON ACTR CHAN 1 POSN	V58H0852A1	N0L0	-1	DEG	1 OF 4	
804-05		VFY	FCL	L OUTBD ELEVON ACTR CHAN 2 POSN	V58H0853A1	N0L0	-1	DEG	1 OF 4	
804-06		VFY	FCL	L OUTBD ELEVON ACTR CHAN 3 POSN	V58H0854A1	N0L0	-1	DEG	1 OF 4	
804-07		VFY	FCL	L OUTBD ELEVON ACTR CHAN 4 POSN	V58H0855A1	N0L0	-1	DEG	INHB MSEQ	
804-08		VFY	FCL	R INBD ELEVON ACTR CHAN 1 POSN	V58H0902A1	N0L0	-1	DEG	1 OF 4	
804-09		VFY	FCL	R INBD ELEVON ACTR CHAN 2 POSN	V58H0903A1	N0L0	-1	DEG	1 OF 4	
804-10		VFY	FCL	R INBD ELEVON ACTR CHAN 3 POSN	V58H0904A1	N0L0	-1	DEG	1 OF 4	
804-11		VFY	FCL	R INBD ELEVON ACTR CHAN 4 POSN	V58H0905A1	N0L0	-1	DEG	INHB MSEQ	
804-12		VFY	FCL	R OUTBD ELEVON ACTR CHAN 1 POSN	V58H0952A1	N0L0	-1	DEG	1 OF 4	
804-13		VFY	FCL	R OUTBD ELEVON ACTR CHAN 2 POSN	V58H0953A1	N0L0	-1	DEG	1 OF 4	
804-14		VFY	FCL	R OUTBD ELEVON ACTR CHAN 3 POSN	V58H0954A1	N0L0	-1	DEG	1 OF 4	
804-15		VFY	FCL	R OUTBD ELEVON ACTR CHAN 4 POSN	V58H0955A1	N0L0	-1	DEG	INHB MSEQ	
804-16		VFY	FCL	RUDDER ACTR CHAN 1 POSN	V57H0150A1	N0L0	-1	DEG	1 OF 4	
804-17		VFY	FCL	RUDDER ACTR CHAN 2 POSN	V57H0151A1	N0L0	-1	DEG	1 OF 4	
804-18		VFY	FCL	RUDDER ACTR CHAN 3 POSN	V57H0152A1	N0L0	-1	DEG	1 OF 4	
804-19		VFY	FCL	RUDDER ACTR CHAN 4 POSN	V57H0153A1	N0L0	-1	DEG	INHB MSEQ	
804-20		VFY	FCL	SPEEDBRAKE ACTR CHAN 1 POSN	V57H0250A1	N0L0	4	DEG	1 OF 4	
804-21		VFY	FCL	SPEEDBRAKE ACTR CHAN 2 POSN	V57H0251A1	N0L0	4	DEG	1 OF 4	
804-22		VFY	FCL	SPEEDBRAKE ACTR CHAN 3 POSN	V57H0252A1	N0L0	4	DEG	1 OF 4	
804-23		VFY	FCL	SPEEDBRAKE ACTR CHAN 4 POSN	V57H0253A1	N0L0	4	DEG	INHB MSEQ	
804-24		VFY	FCL	SELECTED BODY FLAP FDBK	V90H6410C1	N0L0	-1.5	DEG	INHB MSEQ	

\$ AERO-SURFACE NULL CHECK AT PROFILE COMPLETION \$

805-00		VFY	FCL	L INBD ELEVON ACTR CHAN 1 POSN	V58H0802A1	-0.52	1.18	DEG	1 OF 4	
805-01		VFY	FCL	L INBD ELEVON ACTR CHAN 2 POSN	V58H0803A1	-0.52	1.18	DEG	1 OF 4	
805-02		VFY	FCL	L INBD ELEVON ACTR CHAN 3 POSN	V58H0804A1	-0.52	1.18	DEG	1 OF 4	
805-03		VFY	FCL	L INBD ELEVON ACTR CHAN 4 POSN	V58H0805A1	-0.52	1.18	DEG	INHB MSEQ	
805-04		VFY	FCL	L OUTBD ELEVON ACTR CHAN 1 POSN	V58H0852A1	-0.36	1.34	DEG	1 OF 4	
805-05		VFY	FCL	L OUTBD ELEVON ACTR CHAN 2 POSN	V58H0853A1	-0.36	1.34	DEG	1 OF 4	
805-06		VFY	FCL	L OUTBD ELEVON ACTR CHAN 3 POSN	V58H0854A1	-0.36	1.34	DEG	1 OF 4	
805-07		VFY	FCL	L OUTBD ELEVON ACTR CHAN 4 POSN	V58H0855A1	-0.36	1.34	DEG	INHB MSEQ	
805-08		VFY	FCL	R INBD ELEVON ACTR CHAN 1 POSN	V58H0902A1	-0.52	1.18	DEG	1 OF 4	
805-09		VFY	FCL	R INBD ELEVON ACTR CHAN 2 POSN	V58H0903A1	-0.52	1.18	DEG	1 OF 4	
805-10		VFY	FCL	R INBD ELEVON ACTR CHAN 3 POSN	V58H0904A1	-0.52	1.18	DEG	1 OF 4	
805-11		VFY	FCL	R INBD ELEVON ACTR CHAN 4 POSN	V58H0905A1	-0.52	1.18	DEG	INHB MSEQ	
805-12		VFY	FCL	R OUTBD ELEVON ACTR CHAN 1 POSN	V58H0952A1	-0.36	1.34	DEG	1 OF 4	

SEQ	S	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
:	:	:	:	:	:	:	:	:	:	:	:
:	:	CD	T	:	:	DESIGNATOR	SINGL	:	:	:	:
:	:	CLOCK	E	:	:	OR	LO	HIGH	UNIT	:	:

805-13	VFY	FCL	R	OUTBD	ELEVON	ACTR	CHAN	2	POSN	V58H0953A1	-0.36	1.34	DEG	1	OF	4
805-14	VFY	FCL	R	OUTBD	ELEVON	ACTR	CHAN	3	POSN	V58H0954A1	-0.36	1.34	DEG	1	OF	4
805-15	VFY	FCL	R	OUTBD	ELEVON	ACTR	CHAN	4	POSN	V58H0955A1	-0.36	1.34	DEG	INHB	MSEQ	
805-16	VFY	FCL	RUDDER	ACTR	CHAN	1	POSN			V57H0150A1	-0.95	0.95	DEG	1	OF	4
805-17	VFY	FCL	RUDDER	ACTR	CHAN	2	POSN			V57H0151A1	-0.95	0.95	DEG	1	OF	4
805-18	VFY	FCL	RUDDER	ACTR	CHAN	3	POSN			V57H0152A1	-0.95	0.95	DEG	1	OF	4
805-19	VFY	FCL	RUDDER	ACTR	CHAN	4	POSN			V57H0153A1	-0.95	0.95	DEG	INHB	MSEQ	
805-20	VFY	FCL	SPEEDBRAKE	ACTR	CHAN	1	POSN			V57H0250A1	2.45	7.55	DEG	1	OF	4
805-21	VFY	FCL	SPEEDBRAKE	ACTR	CHAN	2	POSN			V57H0251A1	2.45	7.55	DEG	1	OF	4
805-22	VFY	FCL	SPEEDBRAKE	ACTR	CHAN	3	POSN			V57H0252A1	2.45	7.55	DEG	1	OF	4
805-23	VFY	FCL	SPEEDBRAKE	ACTR	CHAN	4	POSN			V57H0253A1	2.45	7.55	DEG	INHB	MSEQ	
805-24	VFY	FCL	SELECTED	BODY	FLAP	FDBK				V90H6410C1	-1.41	1.41	DEG	INHB	MSEQ	
805-25	END	P001														







SEQ	TIME	CD	CLK	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
822-02	A	CMD	GOX	A133524	PRI HOOD UP VLV-OPEN	GSAX8315E	ON					
\$ VERIFY WITHIN 5 SECS \$ 823-00 A VFY GOX 6308A202 HOOD DOWN SWITCH NO.1 GSAX8331E OFF 1 OF 3 823-01 A VFY GOX 6308A203 HOOD DOWN SWITCH NO.3 GSAX8333E OFF 1 OF 3 823-02 A VFY GOX A133716 HOOD POSITION INDICATION GSAX8531A 5 NOHI DEG GTO S20												
\$ REPEAT FOR NO MORE THAN 30 SECS ELSE GO TO S18 \$ 824-00 S15 A VFY GOX 6308A200 HOOD UP SWITCH NO.1 GSAX8321E ON 2 OF 3 824-01 A VFY GOX A133716 HOOD POSITION INDICATOR GSAX8531A 45 NOHI DEG 2 OF 3 824-02 A VFY GOX 6308A201 HOOD UP SWITCH NO.3 GSAX8323E ON GTO S15 GTO S19												
825-00 S18 A CMD GOX A133524 PRI HOOD UP VLV-OPEN GSAX8310E OFF 825-01 A CMD GOX A133524 PRI HOOD UP VLV-OPEN GSAX8315E OFF GTO S30												
825-02 A MSG PRIMARY SYSTEM FAILED GO TO SECONDARY GTO S20												
826-00 S19 A CMD GOX A133524 PRI HOOD UP VLV-OPEN GSAX8310E OFF 826-01 A CMD GOX A133524 PRI HOOD UP VLV-OPEN GSAX8315E OFF GTO S30												
\$ SECONDARY LOOP - HOOD UP \$ 827-00 S20 A CMD GOX A133524 PRI HOOD UP VLV-OPEN GSAX8310E OFF 827-01 A CMD GOX A133524 PRI HOOD UP VLV-OPEN GSAX8315E OFF 827-02 A CMD GOX HOOD SECONDARY MODE SELECTED NSAK0002X ON 827-03 A CMD GOX A133573 SEC HOOD UP VLV-OPEN GSAX8280E ON 827-04 A CMD GOX A133573 SEC HOOD UP VLV-OPEN GSAX8285E ON												
\$ REPEAT FOR NO MORE THAN 30 SECS ELSE GO TO S26 INHB MSEQ \$ 828-00 S25 A VFY GOX 6308A200 HOOD UP SWITCH NO.2 GSAX8327E ON 2 OF 3 828-01 A VFY GOX A133716 HOOD POSITION INDICATOR GSAX8536A 45 NOHI DEG 2 OF 3 828-02 A VFY GOX 6308A201 HOOD UP SWITCH NO.4 GSAX8329E ON GTO S25 GTO S28 INHB MSEQ												
829-00 S26 A CMD GOX A133573 SEC HOOD UP VLV-OPEN GSAX8280E OFF 829-01 A CMD GOX A133573 SEC HOOD UP VLV-OPEN GSAX8285E OFF GTO S200												

DATE	TIME	CD	CLOCK	SEQ	S	I	TIME	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE	UNIT
35									GROUND LAUNCH SEQUENCE DESCRIPTION							OMI S90C5
									DOCUMENT - LCD STS 33							
830-00	S28	A	CMD	GOX	A133573	SEC	H00D	UP	VLV-OPEN	GSAX8280E	OFF					
830-01		A	CMD	GOX	A133573	SEC	H00D	UP	VLV-OPEN	GSAX8285E	OFF					
831-00	S30	A	CMD	GOX	A133680	EXTEND	LOCK	VALVE-CLOSE		GSAX8090E	ON					
831-01		A	CMD	GOX	A133680	EXTEND	LOCK	VALVE-CLOSE		GSAX8095E	ON					
831-02		A	CMD	GOX	A133501	PRIMARY	RETRACT	VLV-RESE		GSAX8170E	OFF					
831-03		A	CMD	GOX	A133501	PRIMARY	RETRACT	VLV-RESE		GSAX8175E	OFF					
831-04		A	CMD	GOX	A133501	PRI	RETRACT	VLV-RETRACT		GSAX8160E	ON					
831-05		A	CMD	GOX	A133501	PRI	RETRACT	VLV-RETRACT		GSAX8165E	ON					
832-00		A	VFY	GOX	\$ VERIFY WITHIN 3 SECS \$											
832-01		A	VFY	GOX	A133508	PRI	RETRACT	VLV	RETRACT	GSAX8162E	ON	2	OF	2		
					A133509	PRI	RETRACT	VLV	RETRACT	GSAX8163E	ON	GTO	S50			
833-00		A	VFY	GOX	\$ VERIFY WITHIN 9 SECS \$											
					6308A109	ARM	FULLY	EXTENDED		GSAX8231E	OFF					
					\$ VERIFY WITHIN 50 SECS \$											
834-00		A	VFY	GOX	6308A103	RETRACT	SWITCH	NO.1		GSAX8221E	ON	1	OF	3		
834-01		A	VFY	GOX	6308A103	RETRACT	SWITCH	NO.1		GSAX8222E	ON	1	OF	3		
834-02		A	VFY	GOX	A133566	ARM	POSITION	INDICATION		GSAX8191A	NOLO	2	DEG			
					GTO S200											
835-00	S50	A	CMD	GOX	A133501	PRI	RETRACT	VLV-RETRACT		GSAX8160E	OFF					
835-01		A	CMD	GOX	A133501	PRI	RETRACT	VLV-RETRACT		GSAX8165E	OFF					
835-02		A	CMD	GOX	A133501	PRIMARY	RETRACT	VLV-RESET		GSAX8170E	ON					
835-03		A	CMD	GOX	A133501	PRIMARY	RETRACT	VLV-RESET		GSAX8175E	ON					
					\$ DELAY 2 SEC \$											
836-00		A	CMD	GOX	A133501	PRIMARY	RETRACT	VLV-RESET		GSAX8170E	OFF					
836-01		A	CMD	GOX	A133501	PRIMARY	RETRACT	VLV-RESET		GSAX8175E	OFF					
836-02		A	CMD	GOX	A133507	SECONDARY	RETRACT-RETRACT		GSAX8180E	ON						
836-03		A	CMD	GOX	A133507	SECONDARY	RETRACT-RETRACT		GSAX8185E	ON						
837-00		A	VFY	GOX	\$ VERIFY WITHIN 50 SECS \$											
837-01		A	VFY	GOX	6308A103	RETRACT	SWITCH	NO.1		GSAX8221E	ON	1	OF	3		
					6308A102	RETRACT	SWITCH	NO.2		GSAX8222E	ON	1	OF	3		



GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI S90C5 - L

DATE 12-10-85

SEQ	TIME	CD	T	E	FUNCTION	DESIGNATOR	SINGL	OR	LO	HIGH	UNIT	VALUE	ELSE	DURATION	LCC	PAGE	S	D
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837-02 A VFY GOX A135566 ARM POSITION INDICATION GSAH8191A NOLO 2 DEG INHB\_MSEQ

GTO S200

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 \$ PAD B - KSC \$  
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KSCB GTO S90

838-00 S70 VFY INTG SITE

839-00	B	CMD	GOX	HIR	CTL	NO.2	LOAD	CONNECT							GSAX9210E	OFF		
839-01	B	CMD	GOX	HTR	CTL	NO.2	LOAD	CONNECT							GSAX9215E	OFF		
839-02	B	CMD	GOX	HIR	CTL	NO.1	LOAD	CONNECT							GSAX9160E	OFF		
839-03	B	CMD	GOX	HTR	CTL	NO.1	LOAD	CONNECT							GSAX9165E	OFF		
839-04	B	CMD	GOX	HTR	CTL	NO.2	AC	ON							GSAX9200E	OFF		
839-05	B	CMD	GOX	HTR	CTL	NO.2	AC	ON							GSAX9205E	OFF		
839-06	B	CMD	GOX	HTR	CTL	NO.1	AC	ON							GSAX9150E	OFF		
839-07	B	CMD	GOX	HTR	CTL	NO.1	AC	ON							GSAX9155E	OFF		
839-08	B	CMD	GOX	A135918	INLET	VLV	PRI	CTL-OPEN							GSAX9050E	ON		
839-09	B	CMD	GOX	A135918	INLET	VLV	PRI	CTL-OPEN							GSAX9055E	ON		

\$ VERIFY WITHIN 2 SECS \$

GTO S108

840-00	B	VFY	GOX	A135918	INLET	VLV	PRI	CTL-OPEN							GSAX9051E	ON		
				GTO	S110													
841-00	B	CMD	GOX	A135920	IN	VLV	CTL	SEL-SEC	SEL						GSAX9060E	ON		
841-01	B	CMD	GOX	A135920	IN	VLV	CTL	SEL-SEC	SEL						GSAX9065E	ON		
841-02	B	CMD	GOX	A135916	IN	VLV	SEC	CTL-OPEN							GSAX9040E	ON		
841-03	B	CMD	GOX	A135916	IN	VLV	SEC	CTL-OPEN							GSAX9045E	ON		

\$ VERIFY WITHIN 2 SECS \$

GTO S109

842-00	B	VFY	GOX	A135920	IN	VLV	CTL	SEL							GSAX9066E	ON		
842-01	B	VFY	GOX	A135916	IN	VLV	SEC	CTL-OPEN							GSAX9046E	ON		
				GTO	S110													

843-00	B	CMD	GOX	A135900	PRI	REG	FLOW	VLV-OPEN							GSAX9020E	ON		
843-01	B	CMD	GOX	A135900	PRI	REG	FLOW	VLV-OPEN							GSAX9025E	ON		
843-02	B	CMD	GOX	A135903	SEC	REG	FLOW	VLV-OPEN							GSAX9030E	ON		

DATE 12-1-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S90C5 - L :

SEQ : TIME : I : FUNC : DISC : NOMENCLATURE : FUNCTION : VALUE : ELSE : DURATION : LCC : S : S :

CD : T : : : : : : : : : : : : : : S :

CLOCK : E : : : : : : : : : : : : : : F :

: D :

843-03 B CMD GOX A135903 SEC REG FLOW VLV-OPEN GSAK9035E ON

\$ HEATED PURGE OFF \$  
 DELAY 20 SEC

\$ PRIMARY LOOP - HOOD UP \$

845-00 B VFY GOX HOOD SECONDARY MODE SELECTED NSAKU002X OFF GT0 S120  
 845-01 B CMD GOX A133524 PRI HOOD UP VALVE-OPEN GSAK8310E ON  
 845-02 B CMD GOX A133524 PRI HOOD UP VALVE-OPEN GSAK8315E ON

\$ VERIFY WITHIN 5 SEC \$

846-00 B VFY GOX 6308A202 HOOD DOWN SWITCH NO.1 GSAX8331E OFF 1 OF 4  
 846-01 B VFY GOX 6308A203 HOOD DOWN SWITCH NO.2 GSAX8332E OFF 1 OF 4  
 846-02 B VFY GOX 6308A206 HOOD DOWN SWITCH NO.3 GSAX8333E OFF 1 OF 4  
 846-03 B VFY GOX A133716 HOOD POSITION INDICATION GSAH8531A 5 NOHI DEG GT0 S120

\$ REPEAT FOR NO. MORE THAN 30 SECS ELSE GO TO S118 \$

847-00 S115 B VFY GOX 6308A200 HOOD UP SWITCH NO.1 GSAX8321E ON 2 OF 4  
 847-01 B VFY GOX 6308A201 HOOD UP SWITCH NO.2 GSAX8322E ON 2 OF 4  
 847-02 B VFY GOX A133716 HOOD POSITION INDICATOR GSAH8531A 45 NOHI DEG 2 OF 4  
 847-03 B VFY GOX 6308A205 HOOD UP SWITCH NO.3 GSAX8323E ON GT0 S115

848-00 S118 B CMD GOX A133524 PRI HOOD UP VLV-OPEN GSAK8310E OFF  
 848-01 B CMD GOX A133524 PRI HOOD UP VLV-OPEN GSAK8315E OFF  
 848-02 B MSG PRIMARY SYSTEM FAILED GO TO SECONDARY  
 GT0 S120

849-00 S119 B CMD GOX A133524 PRI HOOD UP VLV-OPEN GSAK8310E OFF  
 849-01 B CMD GOX A133524 PRI HOOD VLV-OPEN GSAK8315E OFF  
 GT0 S130

\$ SECONDARY LOOP - HOOD UP \$  
 850-00 S120 B CMD GOX A133524 PRI HOOD UP VLV-OPEN GSAK8310E OFF  
 850-01 B CMD GOX A133524 PRI HOOD UP VLV-OPEN GSAK8315E OFF  
 850-02 B CMD GOX HOOD SECONDARY MODE SELECTED NSAKU002X ON  
 850-03 B CMD GOX A133573 SEC HOOD UP VLV-OPEN GSAK8280E ON

DATE	TIME	CD	CLOCK	SEQ	S	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33															
OMI S9005 - L															
850-04	B	CMD	GOX	A133573	SEC	HOOD	UP	VLV-OPEN	GSAX8285E	ON					
\$ REPEAT FOR NO MORE THAN 30 SECS ELSE GO TO \$126 INHB MSEQ \$															
854-00	B	VFY	GOX	6308A200	HOOD	UP	SWITCH	NO.1	GSAX8326E	ON	2 OF 4				
854-01	B	VFY	GOX	6308A201	HOOD	UP	SWITCH	NO.2	GSAX8327E	ON	2 OF 4				
854-02	B	VFY	GOX	A133716	HOOD	POSITION	INDICATOR	45	NOHI	DEG	2 OF 4				
854-03	B	VFY	GOX	6308A205	HOOD	UP	SWITCH	NO.3	GSAX8328E	ON	GTO \$125				
GTO \$128															
855-00	B	CMD	GOX	A133573	SEC	HOOD	UP	VLV-OPEN	GSAX8280E	OFF					
855-01	B	CMD	GOX	A133573	SEC	HOOD	UP	VLV-OPEN	GSAX8285E	OFF					
GTO \$200															
856-00	B	CMD	GOX	A133573	SEC	HOOD	UP	VLV-OPEN	GSAX8280E	OFF					
856-01	B	CMD	GOX	A133573	SEC	HOOD	UP	VLV-OPEN	GSAX8285E	OFF					
857-00	B	CMD	GOX	A133680	EXTEND	LOCK	VALVE-CLOSE		GSAX8090E	ON					
857-01	B	CMD	GOX	A133680	EXTEND	LOCK	VALVE-CLOSE		GSAX8095E	ON					
857-02	B	CMD	GOX	A133501	PRI	RETRACT	VLV-RESE		GSAX8170E	OFF					
857-03	B	CMD	GOX	A133501	PRI	RETRACT	VLV-RESE		GSAX8175E	OFF					
857-04	B	CMD	GOX	A133501	PRI	RETRACT	VLV-RETRACT		GSAX8160E	ON					
857-05	B	CMD	GOX	A133501	PRI	RETRACT	VLV-RETRACT		GSAX8165E	ON					
\$ VERIFY WITHIN 3 SECS \$															
858-00	B	VFY	GOX	A133508	PRI	RETRACT	VLV-RETRACT		GSAX8162E	ON	2 OF 2				
858-01	B	VFY	GOX	A133509	PRI	RETRACT	VLV-RETRACT		GSAX8163E	ON	GTO \$150				
859-00	B	VFY	GOX	6308A109	ARM	FULLY	EXTENDED		GSAX8231E	OFF	GTO \$150				
\$ VERIFY WITHIN 50 SECS \$															
860-00	B	VFY	GOX	6308A103	RETRACT	SWITCH	NO.1		GSAX8221E	ON	1 OF 3				
860-01	B	VFY	GOX	6308A103	RETRACT	SWITCH	NO.1		GSAX8222E	ON	1 OF 3				
860-02	B	VFY	GOX	A133566	ARM	POSITION	INDICATION		GSAX8191A	NOLO	2	DEG	GTO \$150		
GTO \$200															
862-00	B	CMD	GOX	A133501	PRI	RETRACT	VLV-RETRACT		GSAX8160E	OFF					
862-01	B	CMD	GOX	A133501	PRI	RETRACT	VLV-RETRACT		GSAX8165E	OFF					
862-02	B	CMD	GOX	A133501	PRI	RETRACT	VLV-RESET		GSAX8170E	ON					



SEQ	:	TIME	:	CD	:	CLOCK	:	S	:	I	:	FUNC	:	DISC	:	NOMENCLATURE	:	FUNCTION	:	VALUE	:	ELSE	:	DURATION	:	LCC	:	PAGE	:	S
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868-01 V CMD GOX A135920 IN VLV CNTL SEL-SEC SEL GSAK9065E ON  
 868-02 V CMD GOX A135916 IN VLV SEC CNTL-OPEN GSAK9040E ON  
 868-03 V CMD GOX A135916 IN VLV SEC CNTL-OPEN GSAK9045E ON

\$ VERIFY WITHIN 2 SECS \$

869-00 V VFY GOX A135920 IN VLV CNTL SEL-SEC SEL GSAK9061E ON 1 OF 2  
 869-01 V VFY GOX A135920 IN VLV CNTL SEL-SEC SEL GSAK9066E ON AND  
 869-02 V VFY GOX A135916 IN VLV SEC CNTL-OPEN GSAK9041E ON 1 OF 2  
 869-03 V VFY GOX A135916 IN VLV SEC CNTL-OPEN GSAK9046E ON GTO S9

870-00 S9 V CMD GOX A135900 PRI REG FLOW VLV-OPEN GSAK9020E ON  
 870-01 V CMD GOX A135900 PRI REG FLOW VLV-OPEN GSAK9025E ON  
 870-02 V CMD GOX A135903 SEC REG FLOW VLV-OPEN GSAK9030E ON  
 870-03 V CMD GOX A135903 SEC REG FLOW VLV-OPEN GSAK9035E ON

871-00 S10 V \$ HEATED PURGE OFF \$  
 DELAY 20 SEC

\$ PRIMARY LOOP - HOOD UP \$

872-00 V VFY GOX HOOD SECONDARY MODE SELECTED NSAK0002X OFF GTO S20  
 872-01 V CMD GOX A133524 PRI HOOD UP VLV-OPEN GSAK8310E ON  
 872-02 V CMD GOX A133524 PRI HOOD UP VLV-OPEN GSAK8315E ON

\$ VERIFY WITHIN 5 SECS \$

873-00 V VFY GOX 6308A202 HOOD DN SW NO. 1 GSAK8331E OFF 1 OF 8  
 873-01 V VFY GOX 6308A203 HOOD DN SW NO. 2 GSAK8332E OFF 1 OF 8  
 873-02 V VFY GOX 6308A206 HOOD DN SW NO. 3 GSAK8333E OFF 1 OF 8  
 873-03 V VFY GOX A133716 HOOD POS INDICATOR GSAH8531A 5 NOHI DEG 1 OF 8  
 873-04 V VFY GOX 6308A202 HOOD DN SW NO. 1 GSAK8336E OFF 1 OF 8  
 873-05 V VFY GOX 6308A203 HOOD DN SW NO. 2 GSAK8337E OFF 1 OF 8  
 873-06 V VFY GOX 6308A206 HOOD DN SW NO. 3 GSAK8338E OFF 1 OF 8  
 873-07 V VFY GOX A133716 HOOD POS INDICATOR GSAH8536A 5 NOHI DEG GTO S20

\$ REPEAT FOR NO MORE THAN 30 SECS ELSE GO TO S18 \$

874-00 S15 V VFY GOX 6308A200 HOOD UP SW NO. 1 GSAK8321E ON 3 OF 4

DATE	TIME	SEQ	CD	CLOCK	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
GROUND LAUNCH SEQUENCE DESCRIPTOR DOCUMENT - LCD STS 33														
OMI S9005														
874-01	V	VFY	GOX	6308A201	HOOD UP SW NO. 2	GSAX8322E	ON				3 OF 4			
874-02	V	VFY	GOX	6308A205	HOOD UP SW NO. 3	GSAX8323E	ON				3 OF 4			
874-03	V	VFY	GOX	A133716	HOOD POS IND	GSAX8531A	45	51	DEG		GTO S16			
GTO S19														
875-00	S16	V	VFY	GOX	6308A200	HOOD UP SW NO. 1	GSAX8326E	ON			3 OF 4			
875-01	V	VFY	GOX	6308A201	HOOD UP SW NO. 2	GSAX8327E	ON				3 OF 4			
875-02	V	VFY	GOX	6308A205	HOOD UP SW NO. 3	GSAX8328E	ON				3 OF 4			
875-03	V	VFY	GOX	A133716	HOOD POS IND	GSAX8536A	45	51	DEG		GTO S15			
GTO S19														
876-00	S18	V	CMD	GOX	A133524	PRI HOOD UP VLV-OPEN	GSAX8310E	OFF						
876-01	V	CMD	GOX	A133524	PRI HOOD UP VLV-OPEN	GSAX8315E	OFF							
876-02	V	MSG	GOX	PRIMARY SYSTEM FAILED GO TO SECONDARY										
GTO S20														
877-00	S19	V	CMD	GOX	A133524	PRI HOOD UP VLV-OPEN	GSAX8310E	OFF						
877-01	V	CMD	GOX	A133524	PRI HOOD UP VLV-OPEN	GSAX8315E	OFF							
GTO S30														
\$ SECONDARY LOOP - HOOD UP \$														
878-00	S20	V	CMD	GOX	A133524	PRI HOOD UP VLV-OPEN	GSAX8310E	OFF						
878-01	V	CMD	GOX	A133524	PRI HOOD UP VLV-OPEN	GSAX8315E	OFF							
878-02	V	CMD	GOX	HOOD SECONDARY MODE SELECTED										
878-03	V	CMD	GOX	A133573	SEC HOOD UP VLV-OPEN	GSAX8280E	ON							
878-04	V	CMD	GOX	A133573	SEC HOOD UP VLV-OPEN	GSAX8285E	ON							
GTO S28														
\$ REPEAT FOR NO MORE THAN 30 SECS ELSE GO TO S27 INHB MSEQ \$														
879-00	S25	V	VFY	GOX	6308A200	HOOD UP SW NO. 1	GSAX8321E	ON			3 OF 4			
879-01	V	VFY	GOX	6308A201	HOOD UP SW NO. 2	GSAX8322E	ON				3 OF 4			
879-02	V	VFY	GOX	6308A205	HOOD UP SW NO. 3	GSAX8323E	ON				3 OF 4			
879-03	V	VFY	GOX	A133716	HOOD POS IND	GSAX8531A	45	51	DEG		GTO S26			
GTO S28														
879-04	S26	V	VFY	GOX	6308A200	HOOD UP SW NO. 1	GSAX8326E	ON			3 OF 4			
879-05	V	VFY	GOX	6308A201	HOOD UP SW NO. 2	GSAX8327E	ON				3 OF 4			
879-06	V	VFY	GOX	6308A205	HOOD UP SW NO. 3	GSAX8328E	ON				3 OF 4			
879-07	V	VFY	GOX	A133716	HOOD POS IND	GSAX8536A	45	51	DEG		GTO S25			
GTO S28														



DATE	TIME	CD	CLOCK	SEQ	CMD	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	OMI
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885-07	V	CMD	GOX	A	LOCK SEC EXTEND LOCK VLV					GS06205E ON						
										GTO S200						
886-00	S33	V	CMD	GOX	A133501	PRI	RETRACT	VLV-RSET		GS08170E OFF						
886-01		V	CMD	GOX	A133501	PRI	RETRACT	VLV-RSET		GS08175E OFF						
886-02		V	CMD	GOX	A133501	PRI	RETRACT	VLV-RTRACT		GS08160E ON						
886-03		V	CMD	GOX	A133501	PRI	RETRACT	VLV-RTRACT		GS08165E ON						
\$ VERIFY WITHIN 3 SECS \$																
887-00		V	VFY	GOX	A133508	PRI	RETRACT	VLV RTRACT		GS08162E ON		1 OF 2				
887-01		V	VFY	GOX	A133508	PRI	RETRACT	VLV RTRACT		GS08167E ON		AND				
887-02		V	VFY	GOX	A133509	PRI	RETRACT	VLV RTRACT		GS08163E ON		1 OF 2				
887-03		V	VFY	GOX	A133509	PRI	RETRACT	VLV RTRACT		GS08168E ON		GTO S50				
\$ VERIFY WITHIN 9 SECS \$																
888-00		V	VFY	GOX	6308A109	ARM	FULLY EXTENDED	SW 1		GS06071E OFF		1 OF 4				
888-01		V	VFY	GOX	6308A120	ARM	FULLY EXTENDED	SW 2		GS06081E OFF		1 OF 4				
888-02		V	VFY	GOX	6308A109	ARM	FULLY EXTENDED	SW 1		GS06076E OFF		1 OF 4				
888-03		V	VFY	GOX	6308A120	ARM	FULLY EXTENDED	SW 2		GS06086E OFF		GTO S50				
\$ VERIFY WITHIN 50 SECS \$																
889-00		V	VFY	GOX	6308A103	RETRACT	SW NO. 1			GS08221E ON		1 OF 6				
889-01		V	VFY	GOX	6308A102	RETRACT	SW NO. 2			GS08222E ON		1 OF 6				
889-02		V	VFY	GOX	A151111	ARM POS	IND			GS08191A NOLO	2	DEG				
889-03		V	VFY	GOX	6308A103	RETRACT	SW NO. 1			GS08226E ON		1 OF 6				
889-04		V	VFY	GOX	6308A102	RETRACT	SW NO. 2			GS08227E ON		1 OF 6				
889-05		V	VFY	GOX	A151111	ARM POS	IND			GS08196A NOLO	2	DEG				
										GTO S 200						
890-00	S50	V	CMD	GOX	A133501	PRI	RETRACT	VLV-RTRACT		GS08160E OFF						
890-01		V	CMD	GOX	A133501	PRI	RETRACT	VLV-RTRACT		GS08165E OFF						
890-02		V	CMD	GOX	A133501	PRI	RETRACT	VLV-RESET		GS08170E ON						
890-03		V	CMD	GOX	A133501	PRI	RETRACT	VLV-RESET		GS08175E ON						
\$ DELAY 2 SECS \$																
891-00		V	CMD	GOX	A133501	PRI	RETRACT	VLV-RESET		GS08170E OFF						
891-01		V	CMD	GOX	A133501	PRI	RETRACT	VLV-RESET		GS08175E OFF						











SEQ	TIME	CD	CLOCK	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
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898-07 K VFY ARMS OAA SEC REIR RETURN VLV RESET IND GSAX7266E ON DISPLAY

899-00	K	CMD	ARMS	OAA	RESET	PRI	RETRACT	SUPPLY	VLV	GSAX7200E	OFF	
899-01	K	CMD	ARMS	OAA	RESET	PRI	RETRACT	SUPPLY	VLV	GSAX7205E	OFF	
899-02	K	CMD	ARMS	OAA	RESET	SEC	RETRACT	SUPPLY	VLV	GSAX7240E	OFF	
899-03	K	CMD	ARMS	OAA	RESET	SEC	RETRACT	SUPPLY	VLV	GSAX7245E	OFF	
899-04	K	CMD	ARMS	OAA	RESET	PRI	RETRACT	RETURN	VLV	GSAX7220E	OFF	
899-05	K	CMD	ARMS	OAA	RESET	PRI	RETRACT	RETURN	VLV	GSAX7225E	OFF	
899-06	K	CMD	ARMS	OAA	RESET	SEC	RETRACT	RETURN	VLV	GSAX7260E	OFF	
899-07	K	CMD	ARMS	OAA	RESET	SEC	RETRACT	RETURN	VLV	GSAX7265E	OFF	

\$ OAA PWR REMOVAL FROM EXTEND LOCK \$

900-00	K	CMD	ARMS	OAA	UNLOCK	PRI	EXTEND	LOCK	V	GSAX7120E	OFF	
900-01	K	CMD	ARMS	OAA	UNLOCK	PRI	EXTEND	LOCK	V	GSAX7125E	OFF	
900-02	K	CMD	ARMS	OAA	UNLOCK	SEC	EXTEND	LOCK	V	GSAX7140E	OFF	
900-03	K	CMD	ARMS	OAA	UNLOCK	SEC	EXTEND	LOCK	V	GSAX7145E	OFF	

\$ OAA POSITION MONITOR \$

901-00	K	CVFY	ARMS	A	FULLY	RETRACTED	SWITCH	-	RET	GSAX7621E	ON	3.1-16
901-01	K	CVFY	ARMS	A	FULLY	RETRACTED	SWITCH	-	RET	GSAX7626E	ON	3.1-16
901-02	K	CVFY	ARMS	KARMS	RETRACTED	POSITION	SWITCH		NOL0	2	DEG	3.1-16
901-03	K	CVFY	ARMS	OAA	POSITION	INDICATOR			NOL0	2	DEG	3.1-16

\$ RETRY NEXT 2 SEQ NO MORE THAN ONCE \$

902-00	K	CMD	ARMS	OAA	OPEN	ACCUM	CHARGING	V		GSAX7080E	ON	
902-01	K	CMD	ARMS	OAA	OPEN	ACCUM	CHARGING	V		GSAX7085E	ON	

\$ DELAY 1.0S \$

903-00	K	VFY	ARMS	OAA	ACCUM	CHARGE	V	SW-VALVE	OPEN	GSAX7081E	ON	1 OF 4
903-01	K	VFY	ARMS	OAA	ACCUM	CHARGE	V	SW-VALVE	OPEN	GSAX7086E	ON	1 OF 4
903-02	K	VFY	ARMS	OAA	ACCUM	CHARGE	V	SW-VALVE	CLOSE	GSAX7082E	OFF	1 OF 4
903-03	K	VFY	ARMS	OAA	ACCUM	CHARGE	V	SW-VALVE	CLOSE	GSAX7087E	OFF	GTO ST20

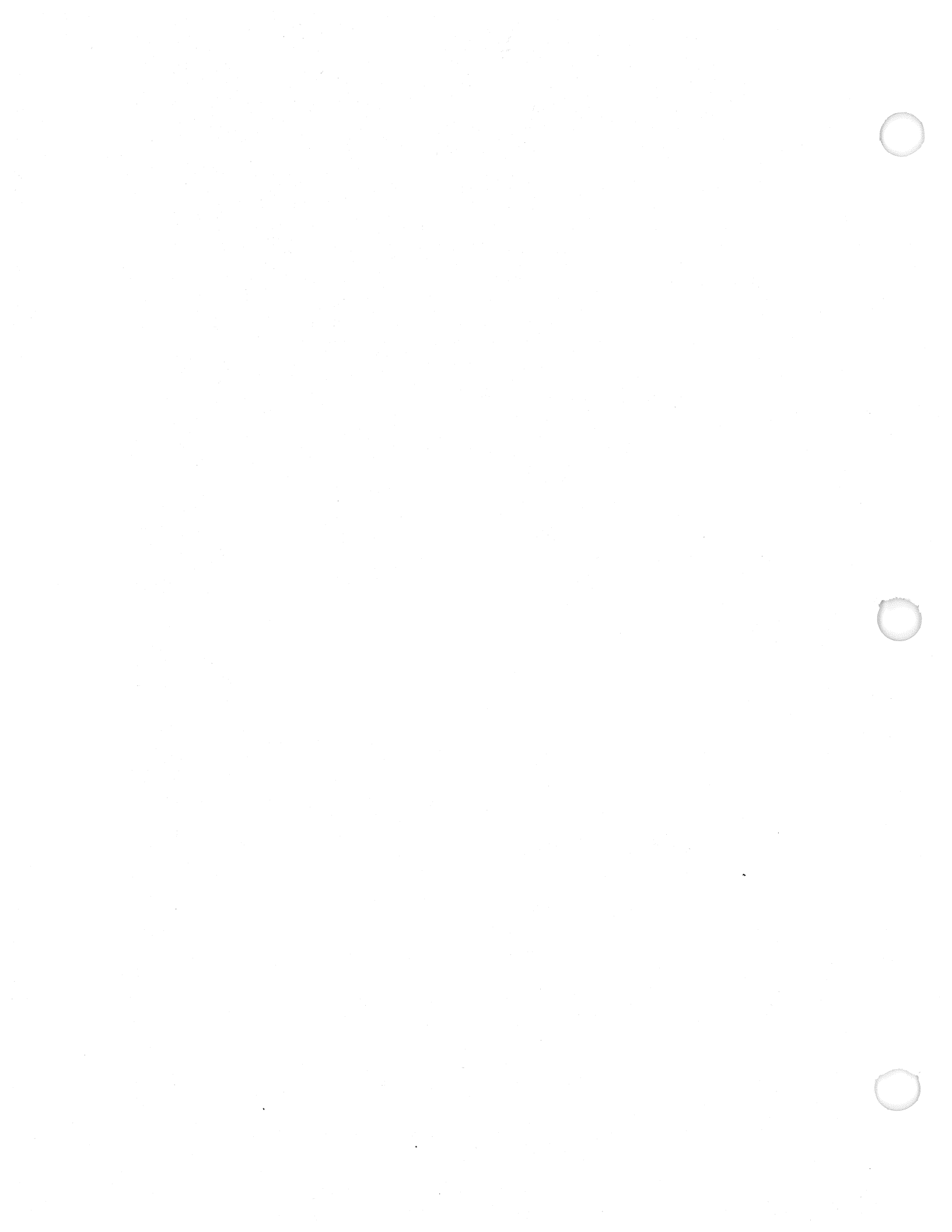
\$ PRINT MSG IF FAILED AFTER RETRY \$

903-04	K	MSG										
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\$ DELAY 1 MIN 00 SEC \$

904-00	K	VFY	ARMS	OAA	ACCUM	LEVEL	SW	NO. 1	NORMAL	GSAX7651E	ON	4 OF 4
904-01	K	VFY	ARMS	OAA	ACCUM	LEVEL	SW	NO. 2	NORMAL	GSAX7671E	ON	4 OF 4





DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S9005 - L

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
		CD				DESIGNATOR	SINGL			PAGE	S
		CLOCK					OR LO	HIGH	UNIT		F
											D

SEQ GLS SEQUENCE NUMBERS

TIME GLS TIME CHECKS

SITE IDENTIFIES SITE REQUIREMENT FOR A GIVEN GLS SEQUENCE  
 K --- KSC UNIQUE CODE (PAD A & PAD B)  
 V --- VLS UNIQUE CODE  
 A --- KSC PAD A UNIQUE CODE  
 B --- KSC PAD B UNIQUE CODE  
 (BLANK) --- COMMON TO ALL SITES

FUNC FUNCTION PERFORMED AT GIVEN GLS SEQUENCE.  
 ACL --- ACTIVATE CONTROL LOGIC  
 CMD --- COMMAND  
 CVFY --- CONTINUOUS FEP MONITORING  
 ICL --- INHIBIT CONTROL LOGIC  
 ISSU --- COMMAND ISSUANCE  
 LABL --- STATEMENT LABEL  
 MMSG --- NEXT MILESTONE MESSAGE  
 MSG --- CURRENT FUNCTION MILESTONE MESSAGE  
 VFY --- ONE TIME BUFFER READ  
 CMLT --- COMMAND MULTIPLES

DISC THE SYSTEM TO WHICH THE FD BELONGS.  
 ELSE GLS MILESTONE INHIBITED  
 M009 (T-9/00) LCC-1 (T-9/00)  
 M0AA (T-7/30)  
 M0APU (T-5/00)  
 M0PS4 (T-4/00)  
 M0L02 (T-2/55)  
 M0LH2 (T-1/57)  
 M0SEQ (T-0/31)  
 M0MENG (T-0/10)  
 M0MSRB (T-0/00)  
 LCC-2 (T-5/00)  
 LCC-3 (T-0/31)  
 LCC-4 (T-0/10)

LCC-PAGE PAGE IN LCC FOR VIOLATION  
 SS FD SUPER SET FUNCTION DESIGNATOR





DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S9005 - L

SEQ	TIME	CD	CLOCK	S	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
									DESIGNATOR	SINGL				
									OR	LO	HIGH	UNIT		

\$ GROUND LAUNCH SEQUENCER OPERATIONS BEGIN WITH GLS INITIALIZATION, INITIALIZATION TIME IS PER THE CONTROLLING OMI. THIS IS GENERALLY T-2 HOURS. \$

\$ FUEL CELL STATUS CHECK \$

112-51	CMD	BHYD	LH	APU	A	GG	HTR	1	ON	CMD	B40K3U22XL	ON		
254-01	CMLT	BHYD	LH	APU	A	GG	HTR	1	ON	CMD	B40K3U22XL	OFF		
591-02	CMD	BHYD	LH	APU	A	GG	HTR	1	ON	CMD	B40K3U22XL	OFF		
112-47	CMD	BHYD	LH	APU	A	GG	HTR	2	ON	CMD	B40K3U23XL	OFF		
	CMLT	BHYD	LH	APU	A	GG	HTR	2	ON	CMD	B40K3U23XL	OFF		
	CMLT	BHYD	LH	APU	A	GG	HTR	2	ON	CMD	B40K3U23XL	OFF		
112-52	CMD	BHYD	LH	APU	B	GG	HTR	1	ON	CMD	B40K3U24XL	ON		
255-01	CMLT	BHYD	LH	APU	B	GG	HTR	1	ON	CMD	B40K3U24XL	OFF		
591-03	CMLT	BHYD	LH	APU	B	GG	HTR	1	ON	CMD	B40K3U24XL	OFF		
112-48	CMD	BHYD	LH	APU	B	GG	HTR	1	ON	CMD	B40K3U25XL	OFF		
	CMLT	BHYD	LH	APU	B	GG	HTR	2	ON	CMD	B40K3U25XL	OFF		
	CMLT	BHYD	LH	APU	B	GG	HTR	2	ON	CMD	B40K3U25XL	OFF		
112-53	CMD	BHYD	RH	APU	A	GG	HTR	1	ON	CMD	B40K4U22XL	ON		
256-01	CMLT	BHYD	RH	APU	A	GG	HTR	1	ON	CMD	B40K4U22XL	OFF		
591-04	CMLT	BHYD	RH	APU	A	GG	HTR	1	ON	CMD	B40K4U22XL	OFF		
112-49	CMD	BHYD	RH	APU	A	GG	HTR	2	ON	CMD	B40K4U23XL	OFF		
	CMLT	BHYD	RH	APU	A	GG	HTR	2	ON	CMD	B40K4U23XL	OFF		
	CMLT	BHYD	RH	APU	A	GG	HTR	2	ON	CMD	B40K4U23XL	OFF		
112-54	CMD	BHYD	RH	APU	B	GG	HTR	1	ON	CMD	B40K4U24XL	ON		
257-01	CMLT	BHYD	RH	APU	B	GG	HTR	1	ON	CMD	B40K4U24XL	OFF		
591-05	CMLT	BHYD	RH	APU	B	GG	HTR	1	ON	CMD	B40K4U24XL	OFF		
112-50	CMD	BHYD	RH	APU	B	GG	HTR	2	ON	CMD	B40K4U25XL	OFF		
	CMLT	BHYD	RH	APU	B	GG	HTR	2	ON	CMD	B40K4U25XL	OFF		
	CMLT	BHYD	RH	APU	B	GG	HTR	2	ON	CMD	B40K4U25XL	OFF		
032-00	CVFY	BHYD	LH	N2H4	BTL	GN2	PRESS	SYS	A		415	PSIA	INHB	MENG
247-04	CVFY	BHYD	LH	N2H4	BTL	GN2	PRESS	SYS	A		NOHI	PSIA	INHB	MENG
032-01	CVFY	BHYD	LH	N2H4	BTL	GN2	PRESS	SYS	B		415	PSIA	INHB	MENG
247-05	CVFY	BHYD	LH	N2H4	BTL	GN2	PRESS	SYS	B		NOHI	PSIA	INHB	MENG
032-02	CVFY	BHYD	RH	N2H4	BTL	GN2	PRESS	SYS	A		415	PSIA	INHB	MENG
247-06	CVFY	BHYD	RH	N2H4	BTL	GN2	PRESS	SYS	A		NOHI	PSIA	INHB	MENG
032-03	CVFY	BHYD	RH	N2H4	BTL	GN2	PRESS	SYS	B		415	PSIA	INHB	MENG
247-07	CVFY	BHYD	RH	N2H4	BTL	GN2	PRESS	SYS	B		NOHI	PSIA	INHB	MENG
112-28	ACL	BHYD	LH	RATE	APU	A	TURBINE	SPEED	SNSR	2	B40K14U8C1	00.0		
243-00	ICL	BHYD	LH	RATE	APU	A	TURBINE	SPEED	SNSR	2	B40K14U8C1	10.0		
242-03	ACL	BHYD	LH	APU	A	TURBINE	SPEED	2			87.4	KRPM		
249-00	CVFY	BHYD	LH	APU	A	TURBINE	SPEED	2			NOHI	KRPM		

2.1-12  
2.1-13

EXIT

DATE 12-10-85 : GROUND LAUNCH SEQUENCE DOCUMENT - LCD STS 33 : OMI S9005 - L

SEQ	TIME	CD	CLOCK	FUNC	DISC	NOMENCLATURE	FUNCTION	SINGL	OR LO	HIGH	UNIT	VALUE	ELSE	DURATION	LCC	PAGE
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273-02				CVFY	BHYD	LH	APU A	TURBINE	SPEED	2	B46R14U8C1	55.0	79.2	KRPM	EXIT		2.1-13
278-00				ICL	BHYD	LH	RATE	APU A	TURBINE	SPEED	SNSR 2	B46R14U8C1	0.00	0.00	KRPM		
519-00				ACL	BHYD	LH	RATE	APU A	TURBINE	SPEED	SNSR 2	B46R14U8C1	N0L0	87.4	KRPM		
112-29				ACL	BHYD	LH	RATE	APU B	TURBINE	SPEED	SNSR 2	B46R14U9C1					
243-01				ICL	BHYD	LH	RATE	APU B	TURBINE	SPEED	SNSR 2	B46R14U9C1	00.0	00.0	KRPM		
262-01				ACL	BHYD	LH	APU 3	TURBINE	SPEED	2	B46K14U9C1	10.0	87.4	KRPM			2.1-12
269-01				CVFY	BHYD	LH	APU B	TURBINE	SPEED	2	B46R14U9C1	55.0	N0HI	KRPM	EXIT		2.1-13
273-03				CVFY	BHYD	LH	APU B	TURBINE	SPEED	2	B46R14U9C1	55.0	79.2	KRPM	EXIT		2.1-13
278-01				ICL	BHYD	LH	RATE	APU B	TURBINE	SPEED	SNSR 2	B46R14U9C1	0.00	0.00	KRPM		
519-01				ACL	BHYD	LH	RATE	APU B	TURBINE	SPEED	SNSR 2	B46R14U9C1	N0L0	87.4	KRPM		
112-30				ACL	BHYD	RH	RATE	APU A	TURBINE	SPEED	SNSR 2	B46K24U8C1					
243-02				ICL	BHYD	RH	RATE	APU A	TURBINE	SPEED	SNSR 2	B46K24U8C1	00.0	00.0	KRPM		
262-02				ACL	BHYD	RH	APU A	TURBINE	SPEED	2	B46K24U8C1	10.0	87.4	KRPM	EXIT		2.1-12
269-02				CVFY	BHYD	RH	APU A	TURBINE	SPEED	2	B46R24U8C1	55.0	N0HI	KRPM	EXIT		2.1-13
273-04				CVFY	BHYD	RH	APU A	TURBINE	SPEED	2	B46R24U8C1	55.0	79.2	KRPM	EXIT		2.1-13
278-02				ICL	BHYD	RH	RATE	APU A	TURBINE	SPEED	SNSR 2	B46R24U8C1	0.00	0.00	KRPM		
519-02				ACL	BHYD	RH	RATE	APU A	TURBINE	SPEED	SNSR 2	B46R24U8C1	0.00	0.00	KRPM		
112-31				ACL	BHYD	RH	RATE	APU B	TURBINE	SPEED	SNSR 2	B46R24U8C1	N0L0	87.4	KRPM		
243-03				ICL	BHYD	RH	RATE	APU B	TURBINE	SPEED	SNSR 2	B46R24U9C1					
262-03				ACL	BHYD	RH	APU 3	TURBINE	SPEED	2	B46R24U9C1	00.0	00.0	KRPM			2.1-12
269-03				CVFY	BHYD	RH	APU 3	TURBINE	SPEED	2	B46R24U9C1	10.0	87.4	KRPM	EXIT		2.1-13
273-05				CVFY	BHYD	RH	APU 3	TURBINE	SPEED	2	B46R24U9C1	55.0	N0HI	KRPM	EXIT		2.1-13
278-03				ICL	BHYD	RH	RATE	APU B	TURBINE	SPEED	SNSR 2	B46R24U9C1	0.00	0.00	KRPM		
519-03				ACL	BHYD	RH	RATE	APU B	TURBINE	SPEED	SNSR 2	B46R24U9C1	N0L0	87.4	KRPM		
050-00				VFY	BHYD	LH	N2H4	BTL	TEMP	SYS A	B46T15U1C1	45.0	139.5	DEGF	1 OF 2		2.1-6
050-01				VFY	BHYD	LH	N2H4	BTL	TEMP	SYS B	B46T15U2C1	45.0	139.5	DEGF	INHB M009		2.1-6
033-00				ACL	BHYD	LH	TEMP	GAS	GENERATOR	BED	SYS A	B46T15U3C1	200	220	DEGF		2.1-7
112-43				ICL	BHYD	LH	TEMP	GAS	GENERATOR	BED	SYS A	B46T15U3C1					
033-01				ACL	BHYD	LH	TEMP	GAS	GENERATOR	BED	SYS B	B46T15U4C1	200	220	DEGF		2.1-7
112-44				ICL	BHYD	LH	TEMP	GAS	GENERATOR	BED	SYS B	B46T15U4C1					
050-04				VFY	BHYD	RH	N2H4	BTL	TEMP	SYS A	B46T25U1C1	45.0	139.5	DEGF	1 OF 2		2.1-6
050-05				VFY	BHYD	RH	N2H4	BTL	TEMP	SYS B	B46T25U2C1	45.0	139.5	DEGF	INHB M009		2.1-5
033-02				ACL	BHYD	RH	TEMP	GAS	GENERATOR	BED	SYS A	B46T25U3C1	200	220	DEGF		2.1-7
112-45				ICL	BHYD	RH	TEMP	GAS	GENERATOR	BED	SYS A	B46T25U3C1					
033-03				ACL	BHYD	RH	TEMP	GAS	GENERATOR	BED	SYS B	B46T25U4C1	200	220	DEGF		2.1-7
112-46				ICL	BYHD	RH	TEMP	GAS	GENERATOR	BED	SYS B	B46T25U4C1					
002-01				CVFY	BHYD	LH	EVENT	APU A	ISLN	VALVE	OPEN		OFF	LCC-3			2.1-10
603-00				VFY	BHYD	LH	EVENT	APU A	ISLN	VALVE	OPEN		OFF	DISPLAY			2.1-10
002-03				CVFY	BHYD	LH	EVENT	APU B	ISLN	VALVE	OPEN		OFF	LCC-3			2.1-10
604-00				VFY	BHYD	LH	EVENT	APU B	ISLN	VALVE	OPEN		OFF	DISPLAY			2.1-10
002-00				CVFY	BHYD	LH	EVENT	APU A	ISLN	VALVE	CLOSED		ON	1 OF 2			2.1-10

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI S9005 - L

DATE 12-10-85

SEQ	TIME	I	FJNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
:	CD	:	:	:	:	DESIGNATOR	:	:	:	PAGE	:
:	CLOCK	:	:	:	:	OR LO	HIGH	:	:	:	:
:	:	:	:	:	:	UNIT	:	:	:	:	:

603-01	VFY	BHYD	LH	EVENT	APU A ISLN VALVE CLOSED	B46X1653X1	ON	DISPLAY			
002-02	CVFY	BHYD	LH	EVENT	APU B ISLN VALVE CLOSED	B46X1854X1	ON	1 OF 2		2.1-10	
604-01	VFY	BHYD	LH	EVENT	APU B ISLN VALVE CLOSED	B46X1854X1	ON	DISPLAY			
002-09	CVFY	BHYD	LH	EV	APU SEC SP CON VLV CLD SYS A	B46X1861X1	ON	LCC-3		2.1-10	
603-02	VFY	BHYD	LH	EV	APU SEC SP CON VLV CLD SYS	B46X1861X1	ON	DISPLAY			
603-03	VFY	BHYD	LH	EV	APU PRI SP CON VLV OP SYS	B46X1502X1	ON	DISPLAY			
002-10	CVFY	BHYD	LH	EV	APU SEC SP CON VLV CLD SYS B	B46X1865X1	ON	LCC-3		2.1-10	
604-02	VFY	BHYD	LH	EV	APU SEC SP CON VLV CLD SYS	B46X1865X1	ON	DISPLAY			
604-03	VFY	BHYD	LH	EV	APU PRI SP CON VLV OP SYS	B46X1864X1	ON	DISPLAY			
002-05	CVFY	BHYD	RH	EVENT	APU A ISLN VALVE OPEN	B46X2851X1	OFF	LCC-3		2.1-10	
605-00	VFY	BHYD	RH	EVENT	APU A ISLN VALVE OPEN	B46X2851X1	OFF	DISPLAY			
002-07	CVFY	BHYD	RH	EVENT	APU B ISLN VALVE OPEN	B46X2852X1	OFF	LCC-3		2.1-10	
606-00	VFY	BHYD	RH	EVENT	APU B ISLN VALVE OPEN	B46X2852X1	OFF	DISPLAY			
002-04	CVFY	BHYD	RH	EVENT	APU A ISLN VALVE CLOSED	B46X2853X1	ON	1 OF 2		2.1-10	
605-01	VFY	BHYD	RH	EVENT	APU A ISLN VALVE CLOSED	B46X2853X1	ON	DISPLAY			
002-05	CVFY	BHYD	RH	EVENT	APU B ISLN VALVE CLOSED	B46X2854X1	ON	LCC-3		2.1-10	
606-01	VFY	BHYD	RH	EVENT	APU B ISLN VALVE CLOSED	B46X2854X1	ON	DISPLAY			
002-11	CVFY	BHYD	RH	EV	APU SEC SP CON VLV CLD SYS A	B46X2861X1	ON	LCC-3		2.1-10	
605-02	VFY	BHYD	RH	EV	APU SEC SP CON VLV CLD SYS	B46X2861X1	ON	DISPLAY			
605-03	VFY	BHYD	RH	EV	APU PRI SP CON VLV OP SYS	B46X2862X1	ON	DISPLAY			
002-08	CVFY	BHYD	RH	EV	APU SEC SP CON VLV CLD SYS B	B46X2863X1	ON	LCC-3		2.1-10	
606-02	VFY	BHYD	RH	EV	APU SEC SP CON VLV CLD SYS	B46X2863X1	ON	DISPLAY			
606-03	VFY	BHYD	RH	EV	APU PRI SP CON VLV OP SYS	B46X2864X1	ON	DISPLAY			
042-00	CVFY	BINS	LH	PRESS	SRM CHAMBER A	B47P1500C1	3.8	45.5	PSIA	2.4-11	
042-01	CVFY	BINS	LH	PRESS	SRM CHAMBER B	B47P1501C1	3.8	45.5	PSIA	2.4-11	
042-02	CVFY	BINS	LH	PRESS	SRM CHAMBER C	B47P1502C1	3.8	45.5	PSIA	2.4-11	
042-03	CVFY	BINS	RH	PRESS	SRM CHAMBER A	B47P2500C1	3.8	45.5	PSIA	2.4-11	
042-04	CVFY	BINS	RH	PRESS	SRM CHAMBER B	B47P2501C1	3.8	45.5	PSIA	2.4-11	
042-05	CVFY	BINS	RH	PRESS	SRM CHAMBER C	B47P2502C1	3.8	45.5	PSIA	2.4-11	
052-00	VFY	BRS	LH	CURRENT	RSS BATTERY NO 1	B55C1J51C1	.02	.75	AMP	2.2-19	
153-10	VFY	BRS	LH	CURRENT	RSS BATTERY NO 1	B55C1U51C1	.02	.75	AMP	2.4-19	
052-02	VFY	BRS	RH	CURRENT	RSS BATTERY NO 1	B55C2U51C1	.02	.75	AMP	2.2-19	
153-11	VFY	BRS	RH	CURRENT	RSS BATTERY NO 1	B55C2U51C1	.02	.75	AMP	2.4-19	
149-00	CMD	BPYR	LH	IGNITION	S/A DEVICE ARM CMD	B55K3U00XL	ON				
151-03	CMD	BPYR	LH	IGNITION	S/A DEVICE ARM CMD	B55K3U00XL	OFF				
506-00	CMD	BPYR	LH	IGNITION	S/A DEVICE ARM CMD	B55K3U00XL	OFF				
506-02	CMD	BPYR	LH	IGNITION	S/A DEVICE 1 SAFE	B55K3U01XL	ON				
538-02	CMD	BPYR	LH	IGNITION	S/A DEVICE 1 SAFE	B55K3U01XL	OFF				
506-03	CMD	BPYR	LH	IGNITION	S/A DEVICE 2 SAFE	B55K3U02XL	ON				
538-03	CMD	BPYR	LH	IGNITION	S/A DEVICE 2 SAFE	B55K3U02XL	OFF				
148-00	CMD	BRS	LH	RSS	S/A DEVICE ARM CMD	B55K3U04XL	ON				

SEQ	TIME	CD	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	DESIGNATOR	SINGL	OR LO	HIGH	UNIT	:
:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:
151-00				CMD	BRS	LH RSS S/A DEVICE ARM CMD	B55K3U44XL	OFF				
530-00				CMD	BRS	LH RSS S/A DEVICE ARM CMD	B55K3U44XL	OFF				
651-00				CMD	BRS	LH RSS S/A DEVICE ARM CMD	B55K3U44XL	OFF				
282-00				CMD	BRS	LH RSS A INHIBIT/RESET CMD	B55K3519E	ON				
517-00				CMD	BRS	LH RSS A INHIBIT/RESET CMD	B55K3519E	OFF				
282-02				CMD	BRS	LH RSS 3 INHIBIT/RESET CMD	B55K352UE	ON				
517-02				CMD	BRS	LH RSS 3 INHIBIT/RESET CMD	B55K352UE	OFF				
149-01				CMD	BPYR	RH IGNITION S/A DEVICE ARM CMD	B55K4UUUXXL	ON				
151-04				CMD	BPYR	RH IGNITION S/A DEVICE ARM CMD	B55K4UUUXXL	OFF				
506-01				CMD	BPYR	RH IGNITION S/A DEVICE ARM CMD	B55K4UUUXXL	OFF				
506-04				CMD	BPYR	RH IGNITION S/A DEVICE 1 SAFE	B55K4JU1XL	ON				
538-04				CMD	BPYR	RH IGNITION S/A DEVICE 1 SAFE	B55K4JU1XL	OFF				
506-05				CMD	BPYR	RH IGNITION S/A DEVICE 2 SAFE	B55K4U02XL	OFF				
538-05				CMD	BPYR	RH IGNITION S/A DEVICE 2 SAFE	B55K4U02XL	OFF				
148-01				CMD	BRS	RH RSS S/A DEVICE ARM CMD	B55K4U44XL	ON				
151-01				CMD	BRS	RH RSS S/A DEVICE ARM CMD	B55K4U44XL	OFF				
530-01				CMD	BRS	RH RSS S/A DEVICE ARM CMD	B55K4U44XL	OFF				
651-01				CMD	BRS	RH RSS S/A DEVICE ARM CMD	B55K4U44XL	OFF				
282-01				CMD	BRS	RH RSS A INHIBIT/RESET CMD	B55K4519E	ON				
517-01				CMD	BRS	RH RSS A INHIBIT/RESET CMD	B55K4519E	OFF				
282-03				CMD	BRS	RH RSS B INHIBIT/RESET CMD	B55K452UE	ON				
517-03				CMD	BRS	RH RSS B INHIBIT/RESET CMD	B55K452UE	OFF				
040-04				CVFY	BPYR	LH VOLTAGE IGN PIC CAP A	B55V15U3C1	NOL0	1.5	V	INHIB MSEQ	2.4-3
538-06				VFY	EPDC	LH VOLTAGE IGNITION PIC CAP A	B55V15U3C1	NOL0	1.5	VDC	DISPLAY	
615-00				VFY	BPYR	LH VOLTAGE IGN PIC CAP A	B55V15U3C1	NOL0	1.5	V	DISPLAY	
040-06				CVFY	BPYR	LH VOLTAGE IGN PIC CAP B	B55V15U4C1	NOL0	1.5	V	INHIB MSEQ	2.4-3
538-07				VFY	EPDC	LH VOLTAGE IGNITION PIC CAP B	B55V15U4C1	NOL0	1.5	VDC	DISPLAY	
515-02				VFY	BPYR	LH VOLTAGE IGN PIC CAP B	B55V15U4C1	NOL0	1.5	V	DISPLAY	
040-08				CVFY	BPYR	LH VOLTAGE FWD THR PIN PIC CAP A	B55V15U5C1	NOL0	1.5	V	INHIB MSEQ	2.6-4
538-10				CVFY	EPDC	LH VOLTAGE FWD THR PIN PIC CAP A	B55V15U5C1	NOL0	1.5	VDC	DISPLAY	
009-09				CVFY	BPYR	LH VOLTAGE FWD THR PIN PIC CAP B	B55V15U6C1	NOL0	1.5	V	LCC-3	2.6-4
538-11				VFY	EPDC	LH VOLTAGE FWD THR PIN PIC CAP B	B55V15U6C1	NOL0	1.5	VDC	DISPLAY	
009-11				CVFY	BPYR	LH VOLTAGE AFT UP R BRC PIC CAP A	B55V15U7C1	NOL0	1.5	V	LCC-3	2.6-5
538-20				VFY	EPDC	LH VOLTAGE AFT UPPER BKT PIC CAP A	B55V15U7C1	NOL0	1.5	VDC	DISPLAY	
009-13				CVFY	BPYR	LH VOLTAGE AFT UPPER BKT PIC CAP B	B55V15U8C1	NOL0	1.5	V	LCC-3	2.6-5
538-21				VFY	EPDC	LH VOLTAGE AFT UPPER BKT PIC CAP B	B55V15U8C1	NOL0	1.5	VDC	DISPLAY	
009-14				CVFY	BPYR	LH VOLTAGE AFT MID BRC PIC CAP A	B55V15U9C1	NOL0	1.5	V	LCC-3	2.6-5
538-22				VFY	EPDC	LH VOLTAGE AFT MID BKT PIC CAP A	B55V15U9C1	NOL0	1.5	VDC	DISPLAY	
040-10				CVFY	BPYR	LH VOLTAGE AFT MID BRC PIC CAP B	B55V1510C1	NOL0	1.5	V	INHIB MSEQ	2.6-5
538-23				VFY	EPDC	LH VOLTAGE AFT MID BKT PIC CAP B	B55V1510C1	NOL0	1.5	VDC	DISPLAY	
009-17				CVFY	BPYR	LH VOLTAGE AFT LWR BRC PIC CAP A	B55V1511C1	NOL0	1.5	V	LCC-3	2.6-5

SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
:	CD	:	:	:	DESIGNATOR	:	:	:	PAGE	:
:	CLOCK	:	:	:	OR LO	HIGH	:	:	:	:
:	:	:	:	:	UNIT	:	:	:	:	:
538-24		VFY	EPDC	LH VOLTAGE AFT LOWER BKT PIC CAP A	B55V1611C1	NOLO	1.5	VDC	DISPLAY	
009-19		CVFY	BPYR	LH VOLTAGE AFT LWR BRC PIC CAB B	B55V1612C1	NOLO	1.5	V	LCC-3	2.6-5
538-25		VFY	EPDC	LH VOLTAGE AFT LOWER BKT PIC CAB B	B55V1612C1	NOLO	1.5	VDC	DISPLAY	
009-21		CVFY	BPYR	LH VOLTAGE FWD SEP MOT PIC CAP A	B55V1613C1	NOLO	1.5	V	LCC-3	2.6-6
538-26		VFY	EPDC	LH VOLTAGE FWD SEP MOT PIC CAP A	B55V1613C1	NOLO	1.5	VDC	DISPLAY	
009-22		CVFY	BPYR	LH VOLTAGE FWD SEP MOT PIC CAP B	B55V1614C1	NOLO	1.5	V	LCC-3	2.6-6
538-27		VFY	EPDC	LH VOLTAGE FWD SEP MOT PIC CAP B	B55V1614C1	NOLO	1.5	VDC	DISPLAY	
009-24		CVFY	BPYR	LH VOLTAGE AFT SEP MOT PIC CAP A	B55V1615C1	NOLO	1.5	V	LCC-3	2.6-7
538-30		VFY	EPDC	LH VOLTAGE AFT SEP MOT PIC CAP A	B55V1615C1	NOLO	1.5	VDC	DISPLAY	
009-26		CVFY	BPYR	LH VOLTAGE AFT SEP MOT PIC CAP B	B55V1616C1	NOLO	1.5	V	LCC-3	2.6-7
538-31		VFY	EPDC	LH VOLTAGE AFT SEP MOT PIC CAP B	B55V1616C1	NOLO	1.5	VDC	DISPLAY	
009-28		CVFY	BPYR	LH VOLTAGE NOSE CAP RLSE PIC CAP	B55V1617C1	NOLO	1.5	V	LCC-3	2.7-5
009-30		CVFY	BPYR	LH VOLTAGE FRUSTRUM RLSE PIC CAP	B55V1618C1	NOLO	1.5	V	LCC-3	2.7-7
009-34		CVFY	BPYR	LH VOLTAGE NOZ EXT SEV PIC CAP	B55V1619C1	NOLO	1.5	V	LCC-3	2.7-5
009-32		CVFY	BPYR	LH VOLTAGE MN CHUTE DISC PIC CAP	B55V1620C1	NOLO	1.5	V	LCC-3	2.7-5
019-00		CVFY	BRS	LH VOLTAGE RSS PIC CAP A	B55V1623C1	NOLO	1.5	V	LCC-4	2.7-4
019-01		CVFY	BRS	LH VOLTAGE RSS PIC CAP B	B55V1624C1	NOLO	1.5	V	LCC-4	2.2-16
052-04		VFY	BPYR	LH VOLTAGE RSS BATTNO 1	B55V1625C1	26.7	32.3	V	INHB M009	2.2-14
040-05		CVFY	BPYR	RH VOLTAGE IGN PIC CAP A	B55V2603C1	NOLO	1.5	V	INHB MSEQ	2.4-8
538-08		VFY	EPDC	RH VOLTAGE IGNITION PIC CAP A	B55V2603C1	NOLO	1.5	VDC	DISPLAY	
615-01		VFY	BPYR	RH VOLTAGE IGN PIC CAP A	B55V2603C1	NOLO	1.5	V	DISPLAY	
040-07		CVFY	BPYR	RH VOLTAGE IGN PIC CAP B	B55V2604C1	NOLO	1.5	V	INHB MSEQ	2.4-8
538-09		VFY	EPDC	RH VOLTAGE IGNITION PIC CAP B	B55V2604C1	NOLO	1.5	VDC	DISPLAY	
615-03		VFY	BPYR	RH VOLTAGE IGN PIC CAP B	B55V2604C1	NOLO	1.5	V	DISPLAY	
009-08		CVFY	BPYR	RH VOLTAGE FWD THR PIN PIC CAP A	B55V2605C1	NOLO	1.5	V	LCC-3	2.6-4
538-12		VFY	EPDC	RH VOLTAGE FWD THR PIN PIC CAP A	B55V2605C1	NOLO	1.5	VDC	DISPLAY	
009-10		CVFY	BPYR	RH VOLTAGE FWD THR PIN PIC CAP B	B55V2606C1	NOLO	1.5	V	LCC-3	2.6-4
538-13		VFY	EPDC	RH VOLTAGE FWD THR PIN PIC CAP B	B55V2606C1	NOLO	1.5	VDC	DISPLAY	
009-12		CVFY	BPYR	RH VOLTAGE AFT UPB BRC PIC CAP A	B55V2607C1	NOLO	1.5	V	LCC-3	2.6-5
538-14		VFY	EPDC	RH VOLTAGE AFT UPPER BKT PIC CAP A	B55V2607C1	NOLO	1.5	VDC	DISPLAY	
040-09		CVFY	BPYR	RH VOLTAGE AFT UPB BRC PIC CAP B	B55V2608C1	NOLO	1.5	V	INHB MSEQ	2.6-5
538-15		VFY	EPDC	RH VOLTAGE AFT UPPER BKT PIC CAP B	B55V2608C1	NOLO	1.5	VDC	DISPLAY	
009-15		CVFY	BPYR	RH VOLTAGE AFT MID BRC PIC CAP A	B55V2609C1	NOLO	1.5	V	LCC-3	2.6-5
538-16		VFY	EPDC	RH VOLTAGE AFT MID BKT PIC CAP A	B55V2609C1	NOLO	1.5	VDC	DISPLAY	
009-16		CVFY	BPYR	RH VOLTAGE AFT MID BRC PIC CAP B	B55V2610C1	NOLO	1.5	V	LCC-3	2.6-5
538-17		VFY	EPDC	RH VOLTAGE AFT MID BKT PIC CAP B	B55V2610C1	NOLO	1.5	VDC	DISPLAY	
009-18		CVFY	BPYR	RH VOLTAGE AFT LWR BRC PIC CAP A	B55V2611C1	NOLO	1.5	V	LCC-3	2.6-5
538-18		VFY	EPDC	RH VOLTAGE AFT LOWER BKT PIC CAP A	B55V2611C1	NOLO	1.5	VDC	DISPLAY	
009-20		CVFY	BPYR	RH VOLTAGE AFT LWR BRC PIC CAB B	B55V2612C1	NOLO	1.5	V	LCC-3	2.6-5
538-19		VFY	EPDC	RH VOLTAGE AFT LOWER BKT PIC CAP B	B55V2612C1	NOLO	1.5	VDC	DISPLAY	
040-11		CVFY	BPYR	RH VOLTAGE FWD SEP MOT PIC CAP A	B55V2613C1	NOLO	1.5	V	INHB MSEQ	2.6-6

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI S9005 - L

DATE 12-10-85

SEQ	TIME	CD	ST	CLOCK	SE	DISC	NOMENCLATURE	FUNCTION	SINGL	OR LO	HIGH	UNIT	ELSE	DURATION	LCC	PAGE
:	:	:	:	:	:	:	:	:	:	:	:	VALUE	:	:	:	:
538-28	VFY	EPDC	RH	VOLTAGE	FWD	SEP	MOTOR PIC	CAP A	B55V2613C1	NOL0	1.5	VDC	DISPLAY			
009-23	CVFY	BPYR	RH	VOLTAGE	FWD	SEP	MOT PIC	CAP B	B55V2614C1	NOL0	1.5	V	LCC-3			2.6-6
538-29	VFY	EPDC	RH	VOLTAGE	FWD	SEP	MOTOR PIC	CAP B	B55V2614C1	NOL0	1.5	VDC	DISPLAY			
009-25	CVFY	BPYR	RH	VOLTAGE	AFT	SEP	MOT PIC	CAP A	B55V2615C1	NOL0	1.5	V	LCC-3			2.6-7
538-32	VFY	EPDC	RH	VOLTAGE	AFT	SEP	MOTOR PIC	CAP A	B55V2615C1	NOL0	1.5	VDC	DISPLAY			
009-27	CVFY	BPYR	RH	VOLTAGE	AFT	SEP	MOT PIC	CAP B	B55V2616C1	NOL0	1.5	V	LCC-3			2.6-7
538-33	VFY	EPDC	RH	VOLTAGE	AFT	SEP	MOTOR PIC	CAP B	B55V2616C1	NOL0	1.5	VDC	DISPLAY			
009-29	CVFY	BPYR	RH	VOLTAGE	NOSE	CAP	RLSE PIC	CAP	B55V2617C1	NOL0	1.5	V	LCC-3			2.7-6
009-31	CVFY	BPYR	RH	VOLTAGE	FRUSTRUM	RLSE PIC	CAP	CAP	B55V2618C1	NOL0	1.5	V	LCC-3			2.7-7
009-35	CVFY	BPYR	RH	VOLTAGE	NOZ	EXT	SEV PIC	CAP	B55V2619C1	NOL0	1.5	V	LCC-3			2.7-5
009-33	CVFY	BPYR	RH	VOLTAGE	MN	CHUTE	DISC PIC	CAP	B55V2620C1	NOL0	1.5	V	LCC-3			2.7-4
019-02	CVFY	BRS	RH	VOLTAGE	RSS	PIC	CAP A		B55V2623C1	NOL0	1.5	V	LCC-4			2.2-16
019-03	CVFY	BRS	RH	VOLTAGE	RSS	PIC	CAP B		B55V2624C1	NOL0	1.5	V	LCC-4			2.2-16
052-06	VFY	BPYR	RH	VOLTAGE	RSS	BATT	NO 1		B55V2625C1	26.7	32.3	V	LCC-4			2.2-14
040-00	CVFY	BPYR	LH	EVENT	IGN	S/A	DEVICE	ARMED	B55X1642X1	OFF			INHB	M009		2.4-4
153-06	CVFY	BPYR	LH	EVENT	IGN	S/A	DEVICE	ARMED	B55X1842X1	ON			INHB	MAPU		2.4-4
040-02	CVFY	BPYR	LH	EVENT	IGN	S/A	DEVICE	ARMED	B55X1643X1	ON			INHB	MSRB		2.4-6
153-08	VFY	BPYR	LH	EVENT	IGN	S/A	DEVICE	ARMED	B55X1643X1	OFF			INHB	MAPU		2.4-5
614-00	VFY	BPYR	LH	EVENT	IGN	S/A	DEVICE	ARMED	B55X1643X1	ON			INHB	MPS4		2.4-7
052-30	VFY	BRS	LH	EVENT	RSS	S/A	DEVICE	ARMED	B55X1643X1	OFF			DISP	LAY		2.2-4
153-03	VFY	BRS	LH	EVENT	RSS	S/A	DEVICE	ARMED	B55X1643X1	OFF			INHB	M009		2.2-28
657-02	VFY	BRS	LH	EVENT	RSS	S/A	DEVICE	ARMED	B55X1643X1	OFF			INHB	MPS4		2.2-28
052-27	VFY	BRS	LH	EVENT	RSS	S/A	DEVICE	ARMED	B55X1643X1	OFF			DISP	LAY		2.2-4
153-00	VFY	BRS	LH	EVENT	RSS	S/A	DEVICE	ARMED	B55X1670X1	OFF			INHB	M009		2.2-4
657-00	VFY	BRS	LH	EVENT	RSS	S/A	DEVICE	ARMED	B55X1670X1	OFF			INHB	MPS4		2.2-17
018-00	VFY	BRS	LH	EVENT	RSS	S/A	DEVICE	ARMED	B55X1670X1	OFF			DISP	LAY		2.2-17
018-01	VFY	BRS	LH	EVENT	RSS	S/A	DEVICE	ARMED	B55X1671X1	ON			7 OF 7			2.2-17
052-13	VFY	BRS	LH	EVENT	RSS	S/A	DEVICE	ARMED	B55X1671X1	ON			7 OF 7			2.2-17
052-14	VFY	BRS	LH	EVENT	RSS	S/A	DEVICE	ARMED	B55X1672X1	ON			INHB	M009		2.2-23
052-18	VFY	BRS	LH	EVENT	RSS	S/A	DEVICE	ARMED	B55X1672X1	ON			INHB	M009		2.2-23
052-19	VFY	BRS	LH	EVENT	RSS	S/A	DEVICE	ARMED	B55X1678X1	OFF			INHB	M009		2.2-23
052-23	VFY	BRS	LH	EVENT	RSS	S/A	DEVICE	ARMED	B55X1679X1	OFF			INHB	M009		2.2-25
052-24	VFY	BRS	LH	EVENT	RSS	S/A	DEVICE	ARMED	B55X1680X1	OFF			INHB	M009		2.2-25
602-02	VFY	BRS	LH	EVENT	RSS	S/A	DEVICE	ARMED	B55X1681X1	ON			DISP	LAY		2.2-25
602-03	VFY	BRS	LH	EVENT	RSS	S/A	DEVICE	ARMED	B55X1682X1	ON			DISP	LAY		2.2-25
040-01	CVFY	BPYR	RH	EVENT	IGN	S/A	DEVICE	ARMED	B55X2642X1	OFF			INHB	MAPU		2.4-4
153-07	CVFY	BPYR	RH	EVENT	IGN	S/A	DEVICE	ARMED	B55X2642X1	ON			INHB	MSRB		2.4-6
040-03	CVFY	BPYR	RH	EVENT	IGN	S/A	DEVICE	ARMED	B55X2645X1	ON			INHB	MAPU		2.4-5
153-09	VFY	BPYR	RH	EVENT	IGN	S/A	DEVICE	ARMED	B55X2645X1	OFF			INHB	MPS4		2.4-7
614-01	VFY	BPYR	RH	EVENT	IGN	S/A	DEVICE	ARMED	B55X2645X1	ON			DISP	LAY		2.4-7
052-31	VFY	BRS	RH	EVENT	RSS	S/A	DEVICE	ARMED	B55X2669X1	ON			INHB	M009		2.2-4

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

DATE 12-10-85

OMI S9005 - L

SEQ	TIME	I	FJNC	DISC	NOMENCLATURE	FUNCTION	SINGL	OR LO	HIGH	UNIT	VALUE	ELSE	DURATION	LCC	S
:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
153-04		BR			RH EVENT RSS S/A DEVICE SAFED	B55X2869X1	OFF					INHB MPS4	2.2-28		
657-03		BR			RH RSS S/A DEVICE SAFED IND	B55X2869X1	ON					DISPLAY			
052-28		BR			RH EVENT RSS S/A DEVICE ARMED	B55X2870X1	OFF					INHB M009	2.2-4		
153-01		BR			RH EVENT RSS S/A DEVICE ARMED	B55X2870X1	ON					INHB MPS4	2.2-17		
657-01		BR			RH RSS S/A DEVICE ARMED IND	B55X2870X1	OFF					DISPLAY			
018-03		BR			RH EV RSS DCDR A ON/CHK TONE OFF	B55X2871X1	ON					7 OF 7			
052-15		BR			RH EV RSS DCDR A ON/CHK TONE OFF	B55X2871X1	ON					INHB M009	2.2-17		
018-04		BR			RH EV RSS DCDR B ON/CHK TONE OFF	B55X2872X1	ON					7 OF 7			
052-16		BR			RH EV RSS DCDR B ON/CHK TONE OFF	B55X2872X1	ON					INHB M009	2.2-17		
052-20		BR			RH EV RSS ARM CMD FROM DCDR A	B55X2877X1	OFF					INHB M009	2.2-23		
052-21		BR			RH EV RSS ARM CMD FROM DCDR B	B55X2877X1	OFF					INHB M009	2.2-23		
052-25		BR			RH EV RSS FIRE CMD FROM DCDR A	B55X2879X1	OFF					INHB M009	2.2-25		
052-26		BR			RH EV RSS FIRE CMD FROM DCDR B	B55X2880X1	OFF					INHB M009	2.2-25		
602-04		BR			RH RSS A INHIBIT/RESET IND	B55X2881X1	ON					DISPLAY	2.2-25		
602-05		BR			RH RSS B INHIBIT/RESET IND	B55X2882X1	ON					DISPLAY	2.2-25		
112-32		ACL	BHYD		LH POSITION TVC ROCK ACTUATOR	B58H1150C1	+1.88			IN	-1.88	EXIT	TIL MENG 2.1-20		
268-00		ACL	BHYD		LH POSITION TVC ROCK ACTUATOR	B58H1150C1	+1.88			IN	-1.88	EXIT	TIL MENG 2.1-20		
274-00		CVFY	BHYD		LH POSITION TVC ROCK ACTUATOR	B58H1150C1	+5			IN	-5	EXIT			
276-00		ICL	BHYD		LH POSITION TVC ROCK ACTUATOR	B58H1150C1	0.00			IN	0.00	EXIT			
812-00		VFY	BHYD		LH POSITION TVC ROCK ACTUATOR	B58H1150C1	.63			IN	NOHI	EXIT			
813-00		VFY	BHYD		LH POSITION TVC ROCK ACTUATOR	B58H1150C1	.63			IN	NOHI	EXIT			
814-00		VFY	BHYD		LH POSITION TVC ROCK ACTUATOR	B58H1150C1	NOLO			IN	-63	EXIT			
112-33		ACL	BHYD		LH POSITION TVC TILT ACTUATOR	B58H1151C1	-5			IN	.5	EXIT			
268-01		ACL	BHYD		LH POSITION TVC TILT ACTUATOR	B58H1151C1	-5			IN	-1.88	EXIT	TIL MENG 2.1-20		
274-01		CVFY	BHYD		LH POSITION TVC TILT ACTUATOR	B58H1151C1	+1.88			IN	-1.88	EXIT			
276-01		ICL	BHYD		LH POSITION TVC TILT ACTUATOR	B58H1151C1	+5			IN	-5	EXIT			
812-02		VFY	BHYD		LH POSITION TVC TILT ACTUATOR	B58H1151C1	0.00			IN	0.00	EXIT			
813-02		VFY	BHYD		LH POSITION TVC TILT ACTUATOR	B58H1151C1	.63			IN	NOHI	EXIT			
814-02		VFY	BHYD		LH POSITION TVC TILT ACTUATOR	B58H1151C1	.63			IN	NOHI	EXIT			
112-34		ACL	BHYD		RH POSITION TVC TILT ACTUATOR	B58H2150C1	-5			IN	.5	EXIT			
268-02		ACL	BHYD		RH POSITION TVC ROCK ACTUATOR	B58H2150C1	-5			IN	-1.88	EXIT	TIL MENG 2.1-20		
274-02		CVFY	BHYD		RH POSITION TVC ROCK ACTUATOR	B58H2150C1	+1.88			IN	-1.88	EXIT			
276-02		ICL	BHYD		RH POSITION TVC ROCK ACTUATOR	B58H2150C1	+5			IN	-5	EXIT			
812-01		VFY	BHYD		RH POSITION TVC ROCK ACTUATOR	B58H2150C1	0.00			IN	0.00	EXIT			
813-01		VFY	BHYD		RH POSITION TVC ROCK ACTUATOR	B58H2150C1	.63			IN	NOHI	EXIT			
814-01		VFY	BHYD		RH POSITION TVC ROCK ACTUATOR	B58H2150C1	.63			IN	NOHI	EXIT			
112-35		ACL	BHYD		RH POSITION TVC TILT ACTUATOR	B58H2151C1	NOLO			IN	-63	EXIT			
268-03		ACL	BHYD		RH POSITION TVC TILT ACTUATOR	B58H2151C1	-5			IN	.5	EXIT			
274-03		CVFY	BHYD		RH POSITION TVC TILT ACTUATOR	B58H2151C1	+1.88			IN	-1.88	EXIT	TIL MENG 2.1-20		
276-03		ICL	BHYD		RH POSITION TVC TILT ACTUATOR	B58H2151C1	+5			IN	-5	EXIT			
812-03		VFY	BHYD		RH POSITION TVC TILT ACTUATOR	B58H2151C1	.63			IN	NOHI	EXIT			



SEQ	TIME	CD	CLOCK	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	IN	ELSE	DURATION	LCC	PAGE
:	:	:	:	:	:	:	DESIGNATOR	:	IN	:	:	:	:
:	:	:	:	:	:	:	OR LO	LO	UNIT	:	:	:	:
813-03				VFY	BHYD	RH POSITION TVC TILT ACTUATOR	B58H2151C1	NOLO	-0.63	IN	EXIT		
814-03				VFY	BHYD	RH POSITION TVC TILT ACTUATOR	B58H2151C1	-0.5	IN	EXIT			
				CMLT	BHYD	LH HPU SYSTEM A-1 START	B58K3U16XL	ON					
520-00				CMD	BHYD	LH HPU SYSTEM A-1 START	B58K3U16XL	OFF					
259-00				CMD	BHYD	LH HPU SYSTEM A-2 START	B58K3U17XL	ON					
520-01				CMD	BHYD	LH HPU SYSTEM A-2 START	B58K3U17XL	OFF					
				CMLT	BHYD	LH HPU SYSTEM B-1 START	B58K3U18XL	ON					
520-02				CMD	BHYD	LH HPU SYSTEM B-1 START	B58K3U18XL	OFF					
259-01				CMD	BHYD	LH HPU SYSTEM B-2 START	B58K3U19XL	ON					
520-03				CMD	BHYD	LH HPU SYSTEM B-2 START	B58K3U19XL	OFF					
254-00				CMLT	BHYD	LH HYD PUMP A BYPASS VLV OPEN	B58K3U20XL	ON					
264-00				CMD	BHYD	LH HYD PUMP A BYPASS VLV OPEN	B58K3U20XL	OFF					
520-08				CMD	BHYD	LH HYD PUMP A BYPASS VLV OPEN	B58K3U20XL	OFF					
255-00				CMLT	BHYD	LH HYD PUMP B BYPASS VLV OPEN	B58K3U21XL	ON					
264-01				CMD	BHYD	LH HYD PUMP B BYPASS VLV OPEN	B58K3U21XL	OFF					
520-09				CMD	BHYD	LH HYD PUMP B BYPASS VLV OPEN	B58K3U21XL	OFF					
				CMLT	BHYD	RH HPU SYSTEM A-1 START	B58K4U16XL	ON					
520-04				CMD	BHYD	RH HPU SYSTEM A-1 START	B58K4U16XL	OFF					
259-02				CMD	BHYD	RH HPU SYSTEM A-2 START	B58K4U17XL	ON					
520-05				CMD	BHYD	RH HPU SYSTEM A-2 START	B58K4U17XL	OFF					
				CMLT	BHYD	RH HPU SYSTEM B-1 START	B58K4U18XL	ON					
520-06				CMD	BHYD	RH HPU SYSTEM B-1 START	B58K4U18XL	OFF					
259-03				CMD	BHYD	RH HPU SYSTEM B-2 START	B58K4U19XL	ON					
520-07				CMD	BHYD	RH HPU SYSTEM B-2 START	B58K4U19XL	OFF					
				CMLT	BHYD	RH HYD PUMP A BYPASS VLV OPEN	B58K4U20XL	ON					
256-00				CMD	BHYD	RH HYD PUMP A BYPASS VLV OPEN	B58K4U20XL	OFF					
264-02				CMD	BHYD	RH HYD PUMP A BYPASS VLV OPEN	B58K4U20XL	OFF					
520-10				CMLT	BHYD	RH HYD PUMP B BYPASS VLV OPEN	B58K4U21XL	ON					
257-00				CMD	BHYD	RH HYD PUMP B BYPASS VLV OPEN	B58K4U21XL	OFF					
264-03				CMD	BHYD	RH HYD PUMP B BYPASS VLV OPEN	B58K4U21XL	OFF					
				CMD	BHYD	RH HYD PUMP B BYPASS VLV OPEN	B58K4U21XL	OFF					
275-00				CVFY	BHYD	LH PRESS HYD FLUID SUPPLY 1	B58P13U3C1	2800	3363	PSIA	EXIT	TIL MENG	2.1-14
275-01				CVFY	BHYD	LH PRESS HYD FLUID SUPPLY 2	B58P13U4C1	2800	3363	PSIA	EXIT	TIL MENG	2.1-14
053-00				VFY	BHYD	LH DELTA PRESS SECONDARY A ROCK	B58P1311A1	-237	+237	PSID	INHB M009		2.1-17
279-00				VFY	BHYD	LH DELTA PRESS SECONDARY A ROCK	B58P1311A1	-990	+990	PSID	EXIT		2.1-19
053-01				VFY	BHYD	LH DELTA PRESS SECONDARY B ROCK	B58P1312A1	-237	+237	PSID	INHB M009		2.1-17
279-01				VFY	BHYD	LH DELTA PRESS SECONDARY B ROCK	B58P1312A1	-990	+990	PSID	EXIT		2.1-19
053-02				VFY	BHYD	LH DELTA PRESS SECONDARY C ROCK	B58P1313A1	-237	+237	PSID	INHB M009		2.1-17
279-02				VFY	BHYD	LH DELTA PRESS SECONDARY C ROCK	B58P1313A1	-990	+990	PSID	EXIT		2.1-19
053-03				VFY	BHYD	LH DELTA PRESS SECONDARY D ROCK	B58P1314A1	-237	+237	PSID	INHB M009		2.1-17
279-03				VFY	BHYD	LH DELTA PRESS SECONDARY D ROCK	B58P1314A1	-990	+990	PSID	EXIT		2.1-19
053-04				VFY	BHYD	LH DELTA PRESS SECONDARY A TILT	B58P1315A1	-237	+237	PSID	INHB M009		2.1-17

SEQ	TIME	CD	CLOCK	DISC	FUNCTION	VALUE	UNIT	ELSE	DURATION	LCC	PAGE
279-04					LH DELTA PRESS SECONDARY A TILT			EXIT			2-1-19
053-05					LH DELTA PRESS SECONDARY B TILT	+990	PSID	INHB M009			2-1-17
279-05					LH DELTA PRESS SECONDARY B TILT	+237	PSID	EXIT			2-1-19
053-06					LH DELTA PRESS SECONDARY C TILT	+990	PSID	INHB M009			2-1-19
279-06					LH DELTA PRESS SECONDARY C TILT	+237	PSID	EXIT			2-1-17
053-07					LH DELTA PRESS SECONDARY D TILT	+990	PSID	INHB M009			2-1-19
279-07					LH DELTA PRESS SECONDARY D TILT	+237	PSID	EXIT			2-1-17
275-02					RH PRESS HYD FLUID SUPPLY 1	+990	PSID	EXIT			2-1-19
275-03					RH PRESS HYD FLUID SUPPLY 2	3363	PSIA	EXIT			2-1-14
053-08					RH DELTA PRESS SECONDARY A ROCK	3363	PSIA	EXIT	TIL MENG		2-1-14
279-08					RH DELTA PRESS SECONDARY A ROCK	+237	PSID	EXIT	TIL MENG		2-1-14
053-09					RH DELTA PRESS SECONDARY B ROCK	+990	PSID	INHB M009			2-1-19
279-09					RH DELTA PRESS SECONDARY B ROCK	+237	PSID	EXIT			2-1-17
053-10					RH DELTA PRESS SECONDARY C ROCK	+990	PSID	INHB M009			2-1-19
279-10					RH DELTA PRESS SECONDARY C ROCK	+237	PSID	EXIT			2-1-17
053-11					RH DELTA PRESS SECONDARY D ROCK	+990	PSID	INHB M009			2-1-19
279-11					RH DELTA PRESS SECONDARY D ROCK	+237	PSID	EXIT			2-1-17
053-12					RH DELTA PRESS SECONDARY A TILT	+990	PSID	INHB M009			2-1-19
279-12					RH DELTA PRESS SECONDARY A TILT	+237	PSID	EXIT			2-1-17
053-13					RH DELTA PRESS SECONDARY B TILT	+990	PSID	INHB M009			2-1-19
279-13					RH DELTA PRESS SECONDARY B TILT	+237	PSID	EXIT			2-1-17
053-14					RH DELTA PRESS SECONDARY C TILT	+990	PSID	INHB M009			2-1-19
279-14					RH DELTA PRESS SECONDARY C TILT	+237	PSID	EXIT			2-1-17
053-15					RH DELTA PRESS SECONDARY D TILT	+990	PSID	INHB M009			2-1-19
279-15					RH DELTA PRESS SECONDARY D TILT	+237	PSID	EXIT			2-1-17
050-02					LH HYD FLUID RSVR LEVEL SYS A	+990	PSID	EXIT			2-1-19
247-00					LH HYD FLUID RSVR LEVEL SYS A	80	PCT	INHB M009			2-1-8
050-03					LH HYD FLUID RSVR LEVEL SYS B	NOHI	PCT	INHB MENG			2-1-9
247-01					LH HYD FLUID RSVR LEVEL SYS B	80	PCT	INHB M009			2-1-8
050-06					RH HYD FLUID RSVR LEVEL SYS A	NOHI	PCT	INHB MENG			2-1-9
247-02					RH HYD FLUID RSVR LEVEL SYS A	80	PCT	INHB M009			2-1-8
050-07					RH HYD FLUID RSVR LEVEL SYS B	NOHI	PCT	INHB MENG			2-1-9
247-03					RH HYD FLUID RSVR LEVEL SYS B	80	PCT	INHB M009			2-1-8
505-00					UNLOCK SRB MDM FOR	NOHI	PCT	INHB MENG			2-1-9
505-01					UNLOCK SRB MDM FOR						
518-00					UNLOCK SRB MDM FOR						
518-01					UNLOCK SRB MDM FOR						
505-02					UNLOCK SRB MDM FOR						
505-03					UNLOCK SRB MDM FOR						
518-02					UNLOCK SRB MDM FOR						
518-03					UNLOCK SRB MDM FOR						

SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	UNIT	ELSE	DURATION	LCC	PAGE	
052-01		VFY	BRS	LH CURRENT RECOV BATT	B76C1J50C1	.02	AMP	INHB	M009		2.2-20	
052-03		VFY	BRS	RH CURRENT RECOV BATT	B76C2U50C1	.02	AMP	INHB	M009		2.2-20	
055-00		VFY	BELE	LH TEMPERATURE RECOVERY BATTERY	B76T150UC1	34.2	102.8	DEGF			2.2-6	
055-01		VFY	BELE	RH TEMPERATURE RECOVERY BATTERY	B76T250UC1	34.2	102.8	DEGF			2.2-6	
009-01		CVFY	BELE	LH VOLTAGE OPERATIONAL BUS A	B76V160UC1	25.5	31.3	V	LCC-3		2.3-4	
009-00		CVFY	BELE	LH VOLTAGE OPERATIONAL BUS A	B76V160UH	24.8	32.0	V	1 OF 2		2.3-4	
111-00		ICL	BELE	LH VOLTAGE OPERATIONAL BUS A	B76V160UC1	25.5	31.3	V	LCC-3		2.3-4	
009-05		CVFY	BELE	LH VOLTAGE OPERATIONAL BUS B	B76V160UH	24.8	32.0	V	1 OF 2		2.3-4	
009-04		CVFY	BELE	LH VOLTAGE OPERATIONAL BUS B	B76V160UH	24.8	32.0	V	1 OF 2		2.3-4	
111-01		ICL	BELE	LH VOLTAGE OPERATIONAL BUS B	B76V160UH	24.8	32.0	V			2.3-4	
052-05		VFY	BELE	LH VOLTAGE RECOV BATT	B76V160UC1	26.7	39.8	V	INHB	M009	2.2-15	
009-03		CVFY	BELE	RH VOLTAGE OPERATIONAL BUS A	B76V260UC1	25.5	31.3	V	LCC-3		2.3-4	
009-02		CVFY	BELE	RH VOLTAGE OPERATIONAL BUS A	B76V260UH	24.8	32.0	V	1 OF 2		2.3-4	
111-02		ICL	BELE	RH VOLTAGE OPERATIONAL BUS A	B76V260UH	24.8	32.0	V			2.3-4	
009-07		CVFY	BELE	RH VOLTAGE OPERATIONAL BUS B	B76V260UC1	25.5	31.3	V	LCC-3		2.3-4	
009-06		CVFY	BELE	RH VOLTAGE OPERATIONAL BUS B	B76V260UH	24.8	32.0	V	1 OF 2		2.3-4	
111-03		ICL	BELE	RH VOLTAGE OPERATIONAL BUS B	B76V260UH	24.8	32.0	V			2.3-4	
052-07		VFY	BELE	RH VOLTAGE RECOV BATT	B76V260UC1	26.7	39.8	V	INHB	M009	2.2-15	
590-00		CMD	BINS	LH DFI SYS PWR OFF CMD	B78K3U1XL	ON						
591-00		CMD	BINS	LH DFI SYS PWR OFF CMD	B78K3U1XL	OFF						
237-00		CMD	BINS	LH FDM AUTO CAL CMD	B78K3U2XL	ON						
239-00		CMD	BINS	LH FDM AUTO CAL CMD	B78K3U2XL	OFF						
524-00		CMD	BINS	LH FDM AUTO CAL CMD	B78K3U2XL	OFF						
235-00		CMD	BINS	LH DFI FLT RCDR INHB CMD	B78K3U3XL	ON						
524-02		CMD	BINS	LH DFI FLT RCDR INHB CMD	B78K3U3XL	ON						
590-01		CMD	BINS	RH DFI SYS PWR OFF CMD	B78K6U1XL	ON						
591-01		CMD	BINS	RH DFI SYS PWR OFF CMD	B78K6U1XL	OFF						
237-01		CMD	BINS	RH FDM AUTO CAL CMD	B78K6U2XL	ON						
239-01		CMD	BINS	RH FDM AUTO CAL CMD	B78K6U2XL	OFF						
524-01		CMD	BINS	RH FDM AUTO CAL CMD	B78K6U2XL	OFF						
235-01		CMD	BINS	RH DFI FLT RCDR INHB CMD	B78K6U3XL	ON						
524-03		CMD	BINS	RH DFI FLT RCDR INHB CMD	B78K6U3XL	ON						
246-00		VFY	GNS	LH EVENT RATE GYRO A PITCH SMRD	B79X1644X1	ON				INHB	MSEQ	2.3-6
246-01		VFY	GNS	LH EVENT RATE GYRO B PITCH SMRD	B79X1645X1	ON				INHB	MSEQ	2.3-6
246-02		VFY	GNS	LH EVENT RATE GYRO C PITCH SMRD	B79X1646X1	ON				INHB	MSEQ	2.3-6
246-03		VFY	GNS	LH EVENT RATE GYRO A YAW SMRD	B79X1647X1	ON				INHB	MSEQ	2.3-6
246-04		VFY	GNS	LH EVENT RATE GYRO B YAW SMRD	B79X1648X1	ON				INHB	MSEQ	2.3-6
246-05		VFY	GNS	LH EVENT RATE GYRO C YAW SMRD	B79X1649X1	ON				INHB	MSEQ	2.3-6
246-06		VFY	GNS	RH EVENT RATE GYRO A PITCH SMRD	B79X2644X1	ON				INHB	MSEQ	2.3-6
246-07		VFY	GNS	RH EVENT RATE GYRO B PITCH SMRD	B79X2645X1	ON				INHB	MSEQ	2.3-6
246-08		VFY	GNS	RH EVENT RATE GYRO C PITCH SMRD	B79X2646X1	ON				INHB	MSEQ	2.3-6

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

DATE 12-10-85

OMI S9005 - L

SEQ	TIME	FJNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
:	CD	:	:	:	DESIGNATOR	:	:	:	PAGE
:	CLOCK	:	:	:	OR LO	:	:	:	:
:	:	:	:	:	HIGH	:	:	:	:
:	:	:	:	:	UNIT	:	:	:	:
246-09		VFY	GNS	RH EVENT RATE GYRO A YAW SMRD	B79X2847X1	ON		INH3 MSEQ	2.3-6
246-10		VFY	GNS	RH EVENT RATE GYRO B YAW SMRD	B79X2848X1	ON		INH3 MSEQ	2.3-6
246-11		VFY	GNS	RH EVENT RATE GYRO C YAW SMRD	B79X2849X1	ON		INH3 MSEQ	2.3-6
329-02		CMD	INTG	JTOY OF LIFTOFF	CMD-LS				
029-03		CMD	INTG	RSLs RESUME COUNT	CMD-LS				
103-00		CMD	INTG	LS BYPASS OF LO2 OTBD VALVE CLOS	CMD-LS				
103-01		CMD	INTG	LS BYPASS OF LH2 OTBD VALVE CLOS	CMD-LS				
252-07		CMD	INTG	LPS - GO FOR RS AUTO SEQ START	CMD-LS				
290-00		CMD	INTG	LPS GO FOR ENG START	CMD-LS				
500-00		CMD	INTG	LAUNCH SEQUENCE HOLD	CMD-LS				
500-01		CMD	INTG	RECYCLE	CMD-LS				
502-03		CMD	INTG	LAUNCH SEQUENCE HOLD	CMD-LS				
502-04		CMD	INTG	RECYCLE	CMD-LS				
802-00		CMD	FCL	INITIATE AERO-SURFACE DRIVE CHEC	CMD-LS				
807-00		CMD	FCL	INITIATE MPS GIMBAL CHECK	CMD-LS				
811-00		CMD	BHYD	SRB FCS/HYD VERIF FLAG	CMD-LS				
107-06		ICL	HYD	MAIN BUS A VOLTAGE - MLP	D76VU10U1				
107-07		ICL	HYD	MAIN BUS B VOLTAGE - MLP	D76VU20U1				
107-08		ICL	HYD	MAIN BUS C VOLTAGE - MLP	D76VU30U1				
652-00	ST510	CMD	BRS	SPEC 100 PRO	DEU 1				
652-01		CMD	BRS	ITEM 25 EXECUTE	DEU 1				
554-00	ST520	CMD	BRS	ITEM 26 EXECUTE	DEU 1				
656-00		CMD	BRS	RESUME	DEU 1				
701-31	ST03	VFY	SSME	ME-1 CHANNEL STATUS P384-6	E41J15U9R1	B000		DISPLAY	
168-03		CVFY	SSME	ME-1 PHASE IN EFFECT	E41J1512B1	B010		INH3 MSEQ	
528-00		VFY	SSME	ME-1 PHASE IN EFFECT	E41J1512B1	B010		GTO ST320	
552-00		VFY	SSME	ME-1 PHASE IN EFFECT	E41J1512B1	B010		GTO ST353	
555-03		VFY	SSME	ME-1 PHASE IN EFFECT	E41J1512B1	B110		GTO ST361	
701-27	ST360	VFY	SSME	ME-1 PHASE IN EFFECT	E41J1512B1	B010		GTO ST01	
701-29		VFY	SSME	ME-1 PHASE IN EFFECT	E41J1512B1	B010		GTO ST02	
034-00		CVFY	SSME	ME-1 OPERATING MODE	E41J1513B1	B011		INH3 MPS4	
168-00		CVFY	SSME	ME-1 OPERATING MODE	E41J1515B1	B100		INH3 MSEQ TIL MLH2	6.2.2-2
240-00		CVFY	SSME	ME-1 OPERATING MODE	E41J1513B1	B110		INH3 MSEQ	
528-01		VFY	SSME	ME-1 OPERATING MODE	E41J1513B1	B011		GTO ST315	
552-01		VFY	SSME	ME-1 OPERATING MODE	E41J1513B1	B011		GTO ST351	
555-01		VFY	SSME	ME-1 OPERATING MODE	E41J1513B1	B011		GTO ST361	
570-00		VFY	SSME	ME-1 OPERATING MODE	E41J1515B1	B011		DISPLAY	
701-26		VFY	SSME	ME-1 OPERATING MODE	E41J1515B1	B010		GTO ST390	
701-28	ST01	VFY	SSME	ME-1 OPERATING MODE	E41J1513B1	B011		2 OF 2	
701-30	ST02	VFY	SSME	ME-1 OPERATING MODE	E41J1513B1	B011		2 OF 2	
701-79		VFY	SSME	ENG1 SELF TEST STATUS	E41J1514B1	B001		GTO ST03	
					E41J1514B1	B011		DISPLAY	

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI S9005 - L

DATE 12-10-85

SEQ	TIME	CD	CLOCK	ST	FUNC	DISC	NOMENCLATURE	DESIGNATOR	SINGL	OR LO	HIGH	UNIT	VALUE	ELSE	DURATION	LCC	PAGE
701-38	ST13				VFY	SSME	ME-2 CHANNEL STATUS P3B4-6	E41J2509B1	B000				B101	DISPLAY			
168-04					CVFY	SSME	ME-2 PHASE IN EFFECT	E41J2512B1	B010				B101	INHB MSEQ			
528-06	ST320				VFY	SSME	ME-2 PHASE IN EFFECT	E41J2512B1	B010					GTO ST325			
553-00	ST353				VFY	SSME	ME-2 PHASE IN EFFECT	E41J2512B1	B010					GTO ST356			
556-03	ST362				VFY	SSME	ME-2 PHASE IN EFFECT	E41J2512B1	B110					GTO ST363			
701-34					VFY	SSME	ME-2 PHASE IN EFFECT	E41J2512B1	B010					GTO ST11			
701-36					VFY	SSME	ME-2 PHASE IN EFFECT	E41J2512B1	B010					GTO ST12			
034-01					CVFY	SSME	ME-2 OPERATING MODE	E41J2513B1	B011					INHB MPS4			
168-01					CVFY	SSME	ME-2 OPERATING MODE	E41J2513B1	B100					INHB MSEQ TIL MLH2			
240-01					CVFY	SSME	ME-2 OPERATING MODE	E41J2513B1	B011					INHB MSEQ			
528-07					VFY	SSME	ME-2 OPERATING MODE	E41J2513B1	B011					GTO ST321			
553-01					VFY	SSME	ME-2 OPERATING MODE	E41J2513B1	B011					GTO ST354			
556-01					VFY	SSME	ME-2 OPERATING MODE	E41J2513B1	B011					GTO ST363			
570-01					VFY	SSME	ME-2 OPERATING MODE	E41J2513B1	B011					DISPLAY			
701-33					VFY	SSME	ME-2 OPERATING MODE	E41J2513B1	B010					2 OF 2			
701-35	ST11				VFY	SSME	ME-2 OPERATING MODE	E41J2513B1	B011					2 OF 2			
701-37	ST12				VFY	SSME	ME-2 OPERATING MODE	E41J2513B1	B011					GTO ST13			
701-80					VFY	SSME	ENG2 SELF TEST STATUS	E41J2514B1	B001					DISPLAY			
701-45					VFY	SSME	ME-3 CHANNEL STATUS P3B4-6	E41J2514B1	B01					INHB MPS4			
168-02					CVFY	SSME	ME-3 PHASE IN EFFECT	E41J3509B1	B000					DISPLAY			
528-12					VFY	SSME	ME-3 PHASE IN EFFECT	E41J3512B1	B010					INHB MSEQ			
554-00	ST325				VFY	SSME	ME-3 PHASE IN EFFECT	E41J3512B1	B010					GTO ST330			
557-03	ST364				VFY	SSME	ME-3 PHASE IN EFFECT	E41J3512B1	B010					GTO ST359			
701-41					VFY	SSME	ME-3 PHASE IN EFFECT	E41J3512B1	B110					GTO ST365			
701-43					VFY	SSME	ME-3 PHASE IN EFFECT	E41J3512B1	B010					GTO ST21			
034-02					CVFY	SSME	ME-3 OPERATING MODE	E41J3513B1	B011					GTO ST22			
168-02					CVFY	SSME	ME-3 OPERATING MODE	E41J3513B1	B100					INHB MSEQ			
240-02					CVFY	SSME	ME-3 OPERATING MODE	E41J3513B1	B110					INHB MSEQ TIL MLH2			
528-13					VFY	SSME	ME-3 OPERATING MODE	E41J3513B1	B011					INHB MSEQ			
554-01					VFY	SSME	ME-3 OPERATING MODE	E41J3513B1	B011					GTO ST326			
557-01					VFY	SSME	ME-3 OPERATING MODE	E41J3513B1	B011					GTO ST357			
570-02					VFY	SSME	ME-3 OPERATING MODE	E41J3513B1	B011					GTO ST365			
701-40					VFY	SSME	ME-3 OPERATING MODE	E41J3513B1	B010					DISPLAY			
701-42	ST21				VFY	SSME	ME-3 OPERATING MODE	E41J3513B1	B010					2 OF 2			
701-44	ST22				VFY	SSME	ME-3 OPERATING MODE	E41J3513B1	B011					2 OF 2			
701-81					VFY	SSME	ME-3 OPERATING MODE	E41J3514B1	B001					GTO ST390			
528-02	ST315				ISSU	SSME	ENG3 SELF TEST STATUS	E41J3514B1	B01					DISPLAY			
528-04					ISSU	SSME	ME-1 RESUME COMMAND	E41K1202B1	ON					2 OF 2			
552-02	ST351				ISSU	SSME	ME-1 RESUME COMMAND	E41K1202B1	ON					2 OF 2			
552-04					ISSU	SSME	ME-1 RESUME CMD	E41K1202B1	ON					GTO ST390			
528-03					ISSU	SSME	ME-1 LIMIT CONTROL ENABLE	E41K1211B1	ON					DISPLAY			





SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
:	CD	T	:	:	:	DESIGNATOR	SINGL	:	:	:	:
:	CLOCK	E	:	:	:	OR	LO	HIGH	UNIT	:	:
:	:	:	:	:	:	:	:	:	:	:	:
552-03			ISSU	SSME	ME-1 LIMIT CONTROL ENABLE CMD	E41K1211BL ON					
528-05			ISSU	SSME	ME-1 PURGE SEQUENCE 3 CMD	E41K1215BL ON					
552-05			ISSU	SSME	ME-1 PURGE SEQUENCE 3 CMD	E41K1215BL ON					
165-00			ISSU	SSME	ME-1 PURGE SEQ NO. 4 (ISSUE FD)	E41K1216BL ON					
528-08	ST321		ISSU	SSME	ME-2 RESUME COMMAND	E41K2202BL ON					
528-10			ISSU	SSME	ME-2 RESUME COMMAND	E41K2202BL ON					
553-02	ST354		ISSU	SSME	ME-2 RESUME CMD	E41K2202BL ON					
553-04			ISSU	SSME	ME-2 RESUME CMD	E41K2202BL ON					
528-09			ISSU	SSME	ME-2 LIMIT CONTROL ENABLE	E41K2211BL ON					
553-03			ISSU	SSME	ME-2 LIMIT CONTROL ENABLE CMD	E41K2211BL ON					
528-11			ISSU	SSME	ME-2 PURGE SEQUENCE 3 CMD	E41K2215BL ON					
553-05			ISSU	SSME	ME-2 PURGE SEQUENCE 3 CMD	E41K2215BL ON					
165-01			ISSU	SSME	ME-2 PURGE SEQ NO. 4 (ISSUE FD)	E41K2216BL ON					
528-14	ST326		ISSU	SSME	ME-3 RESUME COMMAND	E41K3202BL ON					
528-16			ISSU	SSME	ME-3 RESUME COMMAND	E41K3202BL ON					
554-02	ST357		ISSU	SSME	ME-3 RESUME CMD	E41K3202BL ON					
554-04			ISSU	SSME	ME-3 RESUME CMD	E41K3202BL ON					
528-15			ISSU	SSME	ME-3 LIMIT CONTROL ENABLE	E41K3211BL ON					
554-03			ISSU	SSME	ME-3 LIMIT CONTROL ENABLE CMD	E41K3211BL ON					
528-17			ISSU	SSME	ME-3 PURGE SEQUENCE 3 CMD	E41K3215BL ON					
554-05			ISSU	SSME	ME-3 PURGE SEQUENCE 3 CMD	E41K3215BL ON					
165-02			ISSU	SSME	ME-3 PURGE SEQ NO. 4 (ISSUE FD)	E41K3216BL ON					
160-00			VFY	SSME	ME-1 HYDRAULIC PRESSURE	E41P1054B1 2700	NOHI			INHB MPS4	6.2.2-15
160-01			VFY	SSME	ME-2 HYDRAULIC PRESSURE	E41P2054B1 2700	NOHI			INHB MPS4	6.2.2-15
160-02			VFY	SSME	ME-3 HYDRAULIC PRESSURE	E41P3054B1 2700	NOHI			INHB MPS4	6.2.2-15
034-03			CVFY	SSME	ME-1 HPFT DISCH TEMP (CHA)	E41T1010B1 360	NOHI			1 OF 2	6.2.2-19
034-04			CVFY	SSME	ME-1 HPFT DISCH TEMP (CHB)	E41T1011B1 360	NOHI			INHB MSEQ	6.2.2-19
007-00			CVFY	SSME	ME-1 OPDV LOX SUPPLY LINE TEMP#1	E41T11151A1 -160	NOHI			1 OF 2	6.2.2-17
007-06			CVFY	SSME	ME-1 OPDV LOX SUPPLY LINE TEMP#2	E41T11152A1 -160	NOHI			LCC-3	6.2.2-17
007-07			CVFY	SSME	ME-1 MFV N01 DNSTREAM SKIN TEMP	E41T11153A1 -250	NOHI			DEGF	6.2.2-17
034-05			CVFY	SSME	ME-1 MFV N02 DNSTREAM SKIN TEMP	E41T11154A1 -250	NOHI			DEGF	6.2.2-17
034-06			CVFY	SSME	ME-2 HPFT DISCH TEMP (CHA)	E41T2010B1 360	NOHI			LCC-3	6.2.2-18
007-02			CVFY	SSME	ME-2 HPFT DISCH TEMP (CHB)	E41T2011B1 360	NOHI			1 OF 2	6.2.2-19
007-03			CVFY	SSME	ME-2 OPDV LOX SUPPLY LINE TEMP#1	E41T21151A1 -160	NOHI			INHB MSEQ	6.2.2-19
007-08			CVFY	SSME	ME-2 OPDV LOX SUPPLY LINE TEMP#2	E41T21152A1 -160	NOHI			1 OF 2	6.2.2-17
007-09			CVFY	SSME	ME-2 MFV N01 DNSTREAM SKIN TEMP	E41T21153A1 -250	NOHI			DEGF	6.2.2-17
034-07			CVFY	SSME	ME-2 MFV N02 DNSTREAM SKIN TEMP	E41T21154A1 -250	NOHI			DEGF	6.2.2-18
034-08			CVFY	SSME	ME-3 HPFT DISCH TEMP (CHA)	E41T3010B1 360	NOHI			LCC-3	6.2.2-19
007-04			CVFY	SSME	ME-3 HPFT DISCH TEMP (CHB)	E41T3011B1 360	NOHI			1 OF 2	6.2.2-19
007-05			CVFY	SSME	ME-3 OPDV LOX SUPPLY LINE TEMP#1	E41T31151A1 -160	NOHI			INHB MSEQ	6.2.2-19
					ME-3 OPDV LOX SUPPLY LINE TEMP#2	E41T31152A1 -160	NOHI			1 OF 2	6.2.2-17



SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	VALUE	ELSE	DURATION	LCC	PAGE	S
:	CD	T	:	:	:	:	:	:	:	:	:
:	CLOCK	E	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:

007-10			CVFY	SSME	ME-3 MFV N01 DNSTREAM SKIN TEMP						
007-11			CVFY	SSME	ME-3 MFV N02 DNSTREAM SKIN TEMP						
701-00			LABL	INTG							
702-00			LABL	INTG							
703-00			LABL	INTG							
704-00			LABL	INTG							
705-00			LABL	INTG							
706-00			LABL	INTG							
707-00			LABL	INTG							
708-00			LABL	INTG							
709-00			LABL	INTG							
710-00			LABL	INTG							
711-00			LABL	INTG							
712-00			LABL	INTG							
713-00			LABL	INTG							
715-00			LABL	INTG							
717-00			LABL	CINTG							
241-04			V	CMD	ET BIPOD HTR PWR OFF CMD						
241-00			K	CMD	ET BIPOD HTR AC-1 ON CMD						
241-01			K	CMD	ET BIPOD HTR AC-2 ON CMD						
241-08			V	CMD	ET AFT HTR AC PWR OFF CMD						
241-05			V	CMD	ET L BIPOD TEMP CONT OFF CMD						
241-06			V	CMD	ET R BIPOD TEMP CONT OFF CMD						
241-07			V	CMD	ET B/U BIPOD TEMP CONT OFF CMD						
241-02			K	CMD	ET R BIPOD HTR PWR ON CMD						
241-03			K	CMD	ET L BIPOD HTR PWR ON CMD						
241-09			CMD	EPDC	LH2 FDLN INBD HTR AC PWR ON CMD						
241-10			CMD	EPDC	LH2 FDLN OTBD* HTR AC PWR ON CMD						
241-11			CMD	EPDC	L02 EB INBD BKT HTR AC PWR ON C						
241-12			CMD	EPDC	L02 FDLN BKT HTR AC PWR ON CMD						
241-13			CMD	EPDC	L02 EB OTBD BKT HTR AC PWR ON C						
177-03			CMD	EPDC	ORB GND PWR MN BUS A CMD PRI						
177-04			CMD	EPDC	ORB GND PWR MN BUS A CMD SEC						
177-05			CMD	EPDC	ORB GND PWR MN BUS B CMD PRI						
177-06			CMD	EPDC	ORB GND PWR MN BUS B CMD SEC						
177-07			CMD	EPDC	ORB GND PWR MN BUS C CMD PRI						
177-08			CMD	EPDC	ORB GND PWR MN BUS C CMD SEC						
294-00			CMD	EPDC	IT110 BUS ON CMD						
515-10			CMD	EPDC	IT110 BUS ON CMD						
294-01			CMD	EPDC	IT210 BUS ON CMD						
515-11			CMD	EPDC	IT210 BUS ON CMD						

6.2.2-18  
TIL T-1M 6.2.2-18

1 OF 2  
LCC-3

DEGF  
DEGF

NOHI  
NOHI

-250  
-250

E41T3153A1  
E41T3154A1

NOHI  
NOHI

DEGF  
DEGF

NOHI  
NOHI

-250  
-250

E41T3153A1  
E41T3154A1

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI S9005 - L

DATE 12-10-85

SEQ	I	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
		CD				DESIGNATOR				PAGE	
		CLOCK				OR	LO	HIGH	UNIT		

028-01	CMD		INTG		IMU HOLD AVAILABLE TIMER ACTIV.	GC DKTIM1E	ON				
323-00	CMD		INTG		IMU HOLD AVAILABLE TIMER ACTIV.	GC DKTIM1E	OFF				
147-14	CMD		INTG		APU HOLD AVAILABLE TIMER ACTIV.	GC DKTIM2E	ON				
323-01	CMD		INTG		APU HOLD AVAILABLE TIMER ACTIV.	GC DKTIM2E	OFF				
323-02	CMD		INTG		LXX HOLD AVAILABLE TIMER ACTIV.	GC DKTIM3E	OFF				
713-19	CMD		INTG		LXX HOLD AVAILABLE TIMER ACTIV.	GC DKTIM3E	ON				
252-12	CMD		INTG		SPARE CDT TIMER ACTIVATION	GC DKTIM4E	ON				
323-03	CMD		INTG		SPARE CDT TIMER ACTIVATION	GC DKTIM4E	OFF				
320-24	CMD		CINTG		GO FOR CCE PRESSURIZATION - PRI	GC NK3051E	OFF				
717-04	K		CINTG		GO FOR CCE PRESSURIZATION - PRI	GC NK3051E	ON				
501-02	K		CINTG		GLS BREAKOUT FLAG - PRI	GC NK3081E	ON				
252-08	K		CINTG		CCE T-31 SEC AND COUNTING - PRI	GC NK311E	ON				
320-22	K		CINTG		CCE T-31 SEC AND COUNTING - PRI	GC NK311E	OFF				
199-05	K		CINTG		CCE START CU CCLS TERMINAL SEQ - PRI	GC NK311E	OFF				
320-18	K		CINTG		CCE START CU CCLS TERMINAL SEQ - PRI	GC NK3121E	ON				
218-00	K		CINTG		CCE T-1/57 AND COUNTING - PRI	GC NK3121E	OFF				
320-20	K		CINTG		CCE T-1/57 AND COUNTING - PRI	GC NK3121E	ON				
320-25	K		CINTG		GO FOR CCE PRESSURIZATION - SEC	GC NK3531E	ON				
717-05	K		CINTG		GO FOR CCE PRESSURIZATION - SEC	GC NK3531E	OFF				
501-03	K		CINTG		GLS BREAKOUT FLAG - SEC	GC NK3551E	ON				
252-09	K		CINTG		GLS BREAKOUT FLAG - SEC	GC NK3551E	ON				
320-23	K		CINTG		CCE T-31 SEC AND COUNTING - SEC	GC NK3581E	ON				
199-06	K		CINTG		CCE T-31 SEC AND COUNTING - SEC	GC NK3581E	OFF				
320-19	K		CINTG		CCE START CU CCLS TERMINAL SEQ - SEC	GC NK3621E	ON				
218-01	K		CINTG		CCE START CU CCLS TERMINAL SEQ - SEC	GC NK3621E	OFF				
320-21	K		CINTG		CCE T-1/57 AND COUNTING - SEC	GC NK3531E	ON				
199-07	K		CINTG		CCE T-1/57 AND COUNTING - SEC	GC NK3531E	OFF				
568-05	K		CMP		CCE GOX VENT HTR CNTL ENABLE - PRI	GC NK4011E	ON				
199-10	K		CMP		CCE GOX VENT HTR CNTL ENABLE - PRI	GC NK4011E	OFF				
568-08	K		CMP		CCE GOX VENT HTR CNTL ENABLE - SEC	GC NK4511E	ON				
199-09	K		CMP		CCE GOX VENT HTR CNTL ENABLE - SEC	GC NK4511E	OFF				
320-16	K		CMP		CCE GOX VENT HTR DC MOD OFF - PRI	GC NK6030E	ON				
568-07	K		CMP		CCE GOX VENT HTR DC MOD OFF - PRI	GC NK6030E	OFF				
199-08	K		CMP		CCE GOX VENT HTR DC MOD OFF - PRI	GC NK6030E	ON				
568-06	K		CMP		CCE GOX VENT HTR DC MOD ON - PRI	GC NK6031E	ON				
199-12	K		CMP		CCE GOX VENT HTR DC MOD ON - PRI	GC NK6031E	OFF				
320-17	K		CMP		CCE GOX VENT HTR DC MOD OFF - SEC	GC NK6530E	ON				
568-10	K		CMP		CCE GOX VENT HTR DC MOD OFF - SEC	GC NK6530E	OFF				
199-11	K		CMP		CCE GOX VENT HTR DC MOD OFF - SEC	GC NK6531E	ON				
568-09	K		CMP		CCE GOX VENT HTR DC MOD ON - SEC	GC NK6531E	OFF				
046-15	K		CVFY		CINTG GCS QUALIFIER BIT - PRI	GC NK6531E	ON				
						GC NK6530E	ON				

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SEQ	TIME	CD	CLOCK	S	I	FUNC	DISC	NOMENCLATURE	FUNCTION	SINGL	OR LG	HIGH	UNIT	VALUE	ELSE	DURATION	LCC	PAGE
251-01				K	VFY	CINTG	CCE	FLIGHT PRESS OK - PRI	GCNX3143E	ON				1 OF 2				
046-16				K	CVFY	CINTG	CCE	GO FLAG - PRI	GCNX3143E	ON				3 OF 3				
046-17				K	CVFY	CINTG	CCE	NO-GO FLAG - PRI	GCNX3153E	OFF				OR				
046-18				K	CVFY	CINTG	GCS	QUALIFIER BIT - SEC	GCNX3503E	ON				3 OF 3				
251-02				K	VFY	CINTG	CCE	FLIGHT PRESS OK - SEC	GCNX3523E	ON				INH B MSEQ				
046-19				K	CVFY	CINTG	CCE	GO FLAG - SEC	GCNX3543E	ON				3 OF 3				
046-20				K	CVFY	CINTG	CCE	NO-SO FLAG - SEC	GCNX3563E	OFF				INH B MSRB				
816-00				A	CMD	GDX	GOX	VENT PURGE HTR BANK #2 ON CM	GECK1502E	OFF								
820-00				A	CMD	GDX	GOX	VENT PURGE IN PRI VLV CLS CM	GECK1064E	ON								
816-02				A	CMD	GDX	REG	SENSE SEL I/F PRESS PRI CMD	GECK1066E	OFF								
816-05				A	CMD	GDX	GOX	VENT PURGE OUT PRI VLV CLS C	GECK1068E	ON								
816-01				A	CMD	GDX	GOX	VENT PURGE HTR BANK #1 ON CM	GECK3502E	OFF								
820-01				A	CMD	GDX	GOX	VENT PURGE IN SEC VLV CLS CM	GECK3004E	ON								
816-03				A	CMD	GDX	REG	SENSE SEL I/F PRESS SEC CMD	GECK3006E	OFF								
818-01				A	CMD	GDX	GOX	VENT PURGE OUT SEC VLV CLS C	GECK3008E	ON								
816-04				A	CMD	GDX	REG	SENSE SEL SEC VLV CMD	GECK3070E	OFF								
818-03				A	CMD	GDX	PRGE	OUT SEL SEC FLOW CNTL VLV C	GECK3972E	ON								
116-08				K	ACL	PVD	N	COIL INLET PRESS (PRI)IND	GECP2000A	20				INH20	1 OF 2			3.1-5
014-02				K	CVFY	PVD	ORB	PLB I/F PRESS	GECP2200A	20								
116-09				K	ACL	PVD	ORB	B DJCT FLOW DIFF PRESS INC	GECP2201A	24				INH20	1 OF 2			
014-04				K	CVFY	PVD	ORB	AFT I/F PRESS	GECP2300A	24								
014-00				K	CVFY	PVD	ORB	FWD I/F PRESS	GECP2400A	30				INH20	1 OF 2			
116-12				K	ACL	PVD	N	COIL INLET PRESS (SEC)IND	GECP4000A	24								
014-03				K	CVFY	PVD	ORB	PLB DUCT PRESS	GECP4201A	24				INH20	LCC-3			
014-05				K	CVFY	PVD	ORB	AFT DUCT PRESS	GECP4301A	31				INH20	LCC-3			
014-01				K	CVFY	PVD	ORB	FWD DUCT PRESS	GECP4401A	35				INH20	LCC-3			
116-10				A	ACL	GDX	GOX	VENT PURGE CNTL TEMP IND	GECT2811A									
116-11				A	ACL	GDX	GOX	VENT PURGE HEATER TNK TEMP I	GECT2810A									
116-13				A	ACL	GDX	GOX	VENT PURGE TEMP MONITOR IND	GECT4811A									
817-00				A	VFY	GDX	GOX	VENT PURGE OUT PRI VLV CLS I	GEEX1509E	ON								
819-00				A	VFY	GDX	GOX	VENT PURGE OUT SEC VLV CLS I	GEEX3009E	ON								
212-04				A	VFY	GDX	PRGE	OUT SEL SEC FLOW CNTL VLV I	GEEX3075E	ON								
212-05				K	CMD	FCP	6000	PSI GH2 SUPPLY VLV CLOSE CM	GFHK3040E	ON								
212-02				V	CMD	FCP	6000	PSI GH2 SUPPLY VLV CLOSE CM	GFHK3070E	ON								
212-03				CMD	FCP	PRIM	GH2	T-O VENT VLV OPEN CM	GFHK3100E	ON								
212-01				CMD	FCP	GH2	VENT	ISO VLV CLOSE CMD	GFHK3520E	OFF								
210-01				CMD	FCP	T-O	POD	ACT VLV CLOSE CMD	GFHK3541E	ON								
210-12				CMD	FCP	T-O	POD	ACT VLV CLOSE CMD	GFHK3541E	OFF								
210-00				CMD	FCP	T-O	POD	ACT VLV CLOSE ENABLE	GFHK3546E	ON								
212-11				CMD	FCP	T-O	POD	ACT VLV CLOSE ENABLE	GFHK3546E	OFF								
212-00				CMD	FCP	259	PSI	GH2/GHE SUP VLV CLOSE CM	GFHK3550E	ON								

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
:	:	CD	:	:	:	DESIGNATOR	:	:	:	PAGE	:
:	CLOCK	SE	:	:	:	:	OR LO	HIGH	UNIT	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
212-06			CMD	FCP	6000 PSI SUPPLY VLV CLOSE	GF0K1U7UE	ON				S
212-09			CMD	FCP	PRIM G02 T-0 VLV OPEN	GF0K1110E	ON				S
212-10			CMD	FCP	G02 VENT ISO V0V CLOSE CMD	GF0K1529E	OFF				S
210-03			CMD	FCP	T-0 POD ACT VLV CLOSE CMD	GF0K1541E	ON				S
212-14			CMD	FCP	T-0 POD ACT VLV CLOSE CMD	GF0K1541E	OFF				F
210-02			CMD	FCP	T-0 POD ACT VLV CLOSE ENABLE	GF0K1546E	ON				D
212-13			CMD	FCP	T-0 POD ACT VLV CLOSE ENABLE	GF0K1546E	OFF				
532-00			CMD	FCP	915 PSI SUPPLY VLV CLOSE	GF0K1550E	ON				
532-00			CMD	ECLS	GPU1 PUMP 1 START CMD	GF0K1550E	ON				
535-00			CMD	ECLS	GPU1 PUMP 1 START CMD	GF0K1550E	ON				
532-01			CMD	ECLS	GPU1 PUMP 2 START CMD	GF0K1550E	OFF				
535-01			CMD	ECLS	GPU1 PUMP 2 START CMD	GF0K1550E	ON				
297-00			CMD	ECLS	GPU1 PUMP1 STOP CMD	GF0K1U1UE	OFF				
319-00			CMD	ECLS	GPU1 PUMP1 STOP CMD	GF0K1U3UE	ON				
509-00			CMD	ECLS	GPU1 PUMP1 STOP CMD	GF0K1U3UE	OFF				
297-01			CMD	ECLS	GPU1 PUMP1 STOP CMD	GF0K1J5UE	OFF				
319-01			CMD	ECLS	GPU1 PUMP2 STOP CMD	GF0K1U4UE	ON				
509-01			CMD	ECLS	GPU1 PUMP2 STOP CMD	GF0K1U4UE	OFF				
297-02			CMD	ECLS	GPU1 PUMP2 STOP CMD	GF0K1J4UE	OFF				
319-02			CMD	ECLS	GPU1 PUMP3 STOP CMD	GF0K1U5UE	ON				
509-02			CMD	ECLS	GPU1 PUMP3 STOP CMD	GF0K1U5UE	OFF				
316-03			CMD	ECLS	GPU1 PUMP3 STOP CMD	GF0K1U5UE	OFF				
319-03			CMD	ECLS	GPU1 REFRIG UNIT STOP CMD	GF0K1U7UE	ON				
299-00			CMD	ECLS	GPU1 REFRIG UNIT STOP CMD	GF0K1U7UE	OFF				
513-00			CMD	ECLS	GPU1 SUPPLY COOLANT CMD	GF0K114UE	OFF				
578-08			CMD	ECLS	GPU1 SUPPLY COOLANT CMD	GF0K114UE	ON				
299-02			CMD	ECLS	GPU1 SUPPLY COOLANT CMD	GF0K114UE	OFF				
303-00			CMD	ECLS	GPU1 BYP COOLANT CMD	GF0K115UE	ON				
511-00			CMD	ECLS	GPU1 BYP COOLANT CMD	GF0K115UE	OFF				
532-02			CMD	ECLS	GPU1 BYP COOLANT CMD	GF0K115UE	OFF				
535-02			CMD	ECLS	GPU2 PUMP 1 START CMD	GF0K2U0UE	ON				
534-01			CMD	ECLS	GPU2 PUMP 1 START CMD	GF0K2U0UE	OFF				
535-03			CMD	ECLS	GPU2 PUMP 2 START CMD	GF0K2U1UE	ON				
298-00			CMD	ECLS	GPU2 PUMP 2 START CMD	GF0K2U1UE	OFF				
319-20			CMD	ECLS	GPU2 PUMP1 STOP CMD	GF0K2U3UE	ON				
510-00			CMD	ECLS	GPU2 PUMP1 STOP CMD	GF0K2U3UE	OFF				
298-01			CMD	ECLS	GPU2 PUMP2 STOP CMD	GF0K2U4UE	ON				
319-21			CMD	ECLS	GPU2 PUMP2 STOP CMD	GF0K2U4UE	OFF				
510-01			CMD	ECLS	GPU2 PUMP2 STOP CMD	GF0K2U4UE	OFF				
298-02			CMD	ECLS	GPU2 PUMP3 STOP CMD	GF0K2U5UE	ON				
319-22			CMD	ECLS	GPU2 PUMP3 STOP CMD	GF0K2U5UE	OFF				

SEQ	TIME	DISC	FUNC	NO	DESCRIPTION	UNIT	VALUE	ELSE	DURATION	LCC	PAGE
:S	:I	:T	:I	:	:	:	:	:	:	:	:
:CLOCK	:E	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:

510-02			CMD	ECLS	VCU2 PUMP3 STOP	CMD				GFRRK2U5UE	OFF
317-03			CMD	ECLS	VCU2 REFRIG UNIT STOP	CMD				GFRRK2J7UE	ON
299-01			CMD	ECLS	VCU2 REFRIG UNIT STOP	CMD				GFRRK2U7UE	OFF
514-00	ST310		CMD	ECLS	VCU2 SUPPLY COOLANT	CMD				GFRRK214UE	OFF
578-09			CMD	ECLS	VCU2 SUPPLY COOLANT	CMD				GFRRK214UE	ON
299-03			CMD	ECLS	VCU2 SUPPLY COOLANT	CMD				GFRRK214UE	OFF
303-01			CMD	ECLS	VCU2 BYP COOLANT	CMD				GFRRK215UE	ON
511-01			CMD	ECLS	VCU2 BYP COOLANT	CMD				GFRRK215UE	OFF
296-02			VFY	ECLS	VCU1 SUPPLY VALVE OPEN	IND				GFRRK217E	ON
155-00			CMD	SSME	ME-1 MFV HEATER	PWR ON	CMD			GGNKK1U2UE	OFF
529-00			CMD	SSME	ME-1 MFV HEATER	PWR ON	CMD			GGNKK1U2UE	ON
529-02			CMD	SSME	ME-1 MFV HEATER	PWR OFF	CMD			GGNKK1J21E	ON
200-00			CMD	SSME	MPENG GN2 PRG CNT	VLV CLD	CMD			GGNKK1J3UE	OFF
527-04			CMD	SSME	MPENG GN2 PRG CNT	VLV CLD	CMD			GGNKK1J3UE	ON
565-04			CMD	SSME	MPENG GN2 PRG CNT	VLV CLD	CMD			GGNKK1J3UE	OFF
200-02			CMD	SSME	MPENG GN2 PRG CNT	VLV CLD	CMD	OV		GGNKK1J37E	OFF
527-05			CMD	SSME	MPENG GN2 PRG CNT	VLV CLD	CMD	OV		GGNKK1J37E	ON
565-06			CMD	SSME	MPENG GN2 PRG CNT	VLV CLD	CMD	OV		GGNKK1U37E	ON
155-04			CMD	SSME	ME-2 MFV HEATER	PWR ON	CMD			GGNKK1U4UE	OFF
529-04			CMD	SSME	ME-2 MFV HEATER	PWR ON	CMD			GGNKK1J4UE	ON
155-06			CMD	SSME	ME-2 MFV HEATER	PWR OFF	CMD			GGNKK1U41E	ON
529-05			CMD	SSME	ME-2 MFV HEATER	PWR OFF	CMD			GGNKK1U41E	OFF
200-04			CMD	SSME	MPENG GN2 PRG VNT	OPN	CMD			GGNKK1J5UE	ON
565-00			CMD	SSME	MPENG GN2 PRG VNT	OPN	CMD			GGNKK1U5UE	OFF
200-06			CMD	SSME	MPENG GN2 PRG VNT	OPN	CMD			GGNKK1J5UE	OFF
527-02			CMD	SSME	MPENG GN2 PRG VNT	OPN	CMD	OVR		GGNKK1J57E	OFF
565-02			CMD	SSME	MPENG GN2 PRG VNT	OPN	CMD	OVR		GGNKK1U57E	ON
155-08			CMD	SSME	ME-3 MFV HEATER	PWR ON	CMD			GGNKK1J57E	ON
529-08			CMD	SSME	ME-3 MFV HEATER	PWR ON	CMD			GGNKK1U6UE	OFF
155-10			CMD	SSME	ME-3 MFV HEATER	PWR OFF	CMD			GGNKK1J61E	ON
529-10			CMD	SSME	ME-3 MFV HEATER	PWR OFF	CMD			GGNKK1J61E	ON
155-01			CMD	SSME	ME-1 MFV HEATER	PWR ON	(R) CMD			GGNKK111UE	OFF
200-01			CMD	SSME	MPENG GN2 PRG CNT	VLV CLD	CMD	(R)		GGNKK113UE	ON
527-05			CMD	SSME	MPENG GN2 PRG CNT	VLV CLD	CMD	(R)		GGNKK113UE	OFF
565-05			CMD	SSME	MPENG GN2 PRG CNT	VLV CLD	CMD	(R)		GGNKK113UE	OFF
200-03			CMD	SSME	MPENG GN2 PRG CNT	CLD	CMD	(R)		GGNKK1137E	OFF
527-07			CMD	SSME	MPENG GN2 PRG CNT	CLD	CMD	(R)		GGNKK1137E	ON
565-07			CMD	SSME	MPENG GN2 PRG CNT	CLD	CMD	(R)		GGNKK1137E	ON

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SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
:	CD	T	:	:	:	DESIGNATOR	SINGL	:	:	PAGE	:
:	CLOCK	E	:	:	:	OR LO	HIGH	UNIT	:	:	F
:	:	:	:	:	:	:	:	:	:	:	D
200-05			CMD	SSME	MPENG GN2 PRG VNT OPN CMD	GGNK114UE	ON				
527-01			CMD	SSME	MPENG GN2 PRG VNT OPN CMD	GGNK1140E	OFF				
565-01			CMD	SSME	MPENG GN2 PRG VNT OPN CMD	GGNK1140E	OFF				
155-03			CMD	SSME	ME-1 MFV HEATER PWR OFF (R) CMD	GGNK1141E	ON				
529-03			CMD	SSME	ME-1 MFV HEATER PWR OFF (R) CMD	GGNK1141E	OFF				
200-07			CMD	SSME	MPENG GN2 PRG VNT OPN CMD OVR(R)	GGNK1147E	OFF				
527-03			CMD	SSME	MPENG GN2 PRG VNT OPN CMD OVR(R)	GGNK1147E	ON				
565-03			CMD	SSME	MPENG GN2 PRG VNT OPN CMD OVR(R)	GGNK1147E	ON				
155-05			CMD	SSME	ME-2 MFV HEATER PWR ON (R) CMD	GGNK1151E	OFF				
155-07			CMD	SSME	ME-2 MFV HEATER PWR OFF (R) CMD	GGNK1151E	ON				
529-07			CMD	SSME	ME-2 MFV HEATER PWR OFF (R) CMD	GGNK1151E	OFF				
155-11			CMD	SSME	ME-3 MFV HEATER PWR OFF (R) CMD	GGNK1161E	ON				
529-11			CMD	SSME	ME-3 MFV HEATER PWR OFF (R) CMD	GGNK1161E	OFF				
155-09			CMD	SSME	ME-3 MFV HEATER PWR ON (R) CMD	GGNK1170E	OFF				
115-00			ACL	SSME	MPENG GN2 PRG OUT PRESS	GGNP1J34A		900 PSIG	OR		
617-06			VFY	SSME	MPENG GN2 PRG OUT PRESS	GGNP1U34A	630				
115-01			ACL	SSME	MPENG GN2 PRG OUT PRESS(R)	GGNP1139A		900			
617-07			VFY	SSME	MPENG GN2 PRG OUT PRESS(R)	GGNP1139A	630			DISPLAY	
617-02			VFY	SSME	MPENG GN2 PRG CNT VLV OPN IND	GGNX1J35E	ON			OR	
617-04			VFY	SSME	MPENG GN2 PRG CNT VLV OPN IND	GGNX1U35E	ON			DISPLAY	
617-03			VFY	SSME	MPENG GN2 PRG S/O VLV OPN IND	GGNX1U75E	ON			DISPLAY	
617-01			VFY	SSME	MPENG GN2 PRG CNT VLV OPN IND(R)	GGNX1153E	ON			DISPLAY	
617-05			VFY	SSME	MPENG GN2 PRG VNT CLD IND(R)	GGNX1143E	ON			DISPLAY	
281-02			CMD	MPS	MPHE FILL SYS CLOSE CMD	GHKX1165E	ON			DISPLAY	
281-00			CMD	MPS	MPHE FILL CLOSE OVR	GHEK1UUUE	ON				
281-05			CMD	MPS	MPHE FILL OUTPUT VENT OPEN CMD	GHEK1U06E	OFF				
281-04			CMD	MPS	MPHE FILL VENT OVR	GHEK1J17E	OFF				
281-03			CMD	MPS	MPHE FILL SYS CLOSE CMD (R)	GHEK110UE	ON				
281-01			CMD	MPS	MPHE FILL CLOSE OVR (R)	GHEK110UE	ON				
281-07			CMD	MPS	MPHE FILL OUTPUT VENT OPEN CMD(R)	GHEK1108E	OFF				
281-05			CMD	MPS	MPHE FILL VENT OVR (R)	GHEK112UE	ON				
112-04			ACL	BHYD	HRS 6684 BYPASS VALVE OPEN CMD	GHEK1127E	OFF				
112-05			ACL	BHYD	HRS 6684 BYPASS VALVE CLOSE CMD	GHYK226UER					
112-06			ACL	BHYD	HRS 6585 BYPASS VALVE OPEN	GHYK227UER					
112-07			ACL	BHYD	HRS 6685 BYPASS VALVE CLOSE	GHYK256UER					
112-08			ACL	BHYD	HRS 6687 BYPASS VALVE OPEN	GHYK257UER					
112-09			ACL	BHYD	HRS 6687 BYPASS VALVE CLOSE	GHYK260UER					
112-10			ACL	BHYD	HRS 6688 BYPASS VALVE OPEN	GHYK267UER					
112-11			ACL	BHYD	HRS 6688 BYPASS VALVE CLOSE	GHYK316UER					
112-42			ACL	BHYD	HRS 6430 AFT SKIRT PURG HTR ON C	GHYK317UER					
						GHYK300UER					

DATE	TIME	CD	CLOCK	SEQ	S	I	FUNC	DISC	NOMENCLATURE	FUNCTION	DESIGNATOR	SINGL	OR	LO	HIGH	UNIT	ELSE	DURATION	LCC	PAGE	
12-10-85																					OMI S9005 - L
107-00									6416 PUMP NO 1 PRESSURE	GHP1185A											
107-01									6416 PUMP NO 2 PRESSURE	GHP1187A											
107-04									6417 PUMP NO 1 PRESSURE	GHP1485A											
107-05									6417 PUMP NO 2 PRESSURE	GHP1487A											
107-02									6421 PUMP NO 1 PRESSURE	GHP1785A											
107-03									6421 PUMP NO 2 PRESSURE	GHP1787A											
112-12									6684 RETURN PRESSURE	GHP2385A											
112-13									6585 RETURN PRESSURE	GHP2885A											
112-14									6587 RETURN PRESSURE	GHP2985A											
112-15									6688 RETURN PRESSURE	GHP3285A											
112-41									AFT SKIRT PURGE GN2 PRES	GHP8114A											
112-00									6584 LOW FLOW GPM	GHR2387A											
112-01									6585 LOW FLOW GPM	GHR2687A											
112-02									6587 LOW FLOW GPM	GHR2987A											
112-03									6688 LOW FLOW GPM	GHR3287A											
112-16									6583 PUMP NO 1 TEMPERATURE	GHTU286A											
112-17									6583 PUMP NO 2 TEMPERATURE	GHTU288A											
112-18									6586 PUMP NO 1 TEMPERATURE	GHTU586A											
112-19									6586 PUMP NO 2 TEMPERATURE	GHTU588A											
112-40									AFT SKIRT GN2 PURGE TEMP	GHT8U13A											
112-20									6584 BYPASS VALVE OPEN	GHX2282E											
112-21									6584 BYPASS VALVE CLOSE	GHX2282E											
112-22									6685 BYPASS VALVE OPEN	GHX2582E											
112-23									6685 BYPASS VALVE CLOSE	GHX2582E											
112-24									6687 BYPASS VALVE OPEN	GHX2882E											
112-25									6587 BYPASS VALVE CLOSE	GHX2882E											
112-26									6688 BYPASS VALVE OPEN	GHX3182E											
112-27									6588 BYPASS VALVE CLOSE	GHX3182E											
292-00									IT111 LH2 PUMP1 PRI BUS CMD	GLHKU175E										OFF	
515-01									IT111 LH2 PUMP 1 PRI BUS CMD	GLHKU175E										OFF	
292-01									IT112 LH2 PUMP2 PRI BUS CMD	GLHKU174E										OFF	
515-02									IT112 LH2 PUMP 2 PRI BUS CMD	GLHKU174E										OFF	
292-02									IT113 LH2 PUMP3 PRI BUS CMD	GLHKU175E										OFF	
515-03									IT113 LH2 PUMP 3 PRI BUS CMD	GLHKU175E										OFF	
292-03									IT211 LH2 PUMP1 BUS CMD	GLHKU278E										OFF	
515-04									IT211 LH2 PUMP 1 BUS CMD	GLHKU278E										OFF	
292-04									IT212 LH2 PUMP2 BUS CMD	GLHKU277E										OFF	
515-05									IT212 LH2 PUMP 2 BUS CMD	GLHKU277E										OFF	
292-05									IT213 LH2 PUMP3 BUS CMD	GLHKU278E										OFF	
515-06									IT213 LH2 PUMP 3 BUS CMD	GLHKU278E										OFF	
508-00									A75616 ET PRS PR CTL VLV 0 CMD	GLHK4521E										OFF	

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GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

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SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
:	:	:	:	:	DESIGNATOR	:	:	:	:	:
:	CLOCK	:	:	:	SINGL	:	:	:	:	:
:	:	:	:	:	OR LO	HIGH	:	:	:	:
:	:	:	:	:	UNIT	:	:	:	:	:

508-01		CMD	LH2	A75617 ET PRESS SEC CTL VLV OP C	GLHK4351E	OFF				
508-02		CMD	LH2	A75610 ET PRESS SOV CL CMD	GLHK4541E	ON				
568-03		CMD	MPS	EXPOSED PRI FIRE DETS OFF CMD	GLHK7490E	ON				
282-06		CMD	MPS	EXPOSED SEC FIRE DETS OFF CMD	GLHK7490E	OFF				
568-04		CMD	MPS	EXPOSED SEC FIRE DETS OFF CMD	GLHK7500E	ON				
225-34		VFY	MPS	HI PT BLEED TEMP	GLHK7500E	OFF				
571-02		VFY	LH2	FD 35 ALARM ON IND	GLHT4119A	NOLO	-412	DEGF		6.2.1-11
571-03		VFY	MPS	ORB AFT LFT VENT FD 36 ALARM ON	GLHX7343E	OFF				
571-04		VFY	MPS	ORB AFT LFT VENT FD 37 ALARM ON	GLHX7453E	OFF				
571-05		VFY	MPS	SSME C/O FD 38 ALARM ON	GLHX7463E	OFF				
571-08		CVFY	MPS	SSME C/O FD 38 ALARM ON	GLHX7473E	OFF				
714-10		CVFY	MPS	SSME C/O FD 38 ALARM ON	GLHX7473E	OFF				
571-06		VFY	MPS	SSME C/O FD 39 ALARM ON	GLHX7473E	OFF				
571-09		CVFY	MPS	SSME C/O FD 39 ALARM ON	GLHX7483E	OFF				
714-11		CVFY	MPS	SSME C/O FD 39 ALARM ON	GLHX7483E	OFF				
507-00		CMD	L02	A75082 ET HE PRI PREPRESS VLV OP	GLWK2U01E	OFF				
507-01		CMD	L02	A75080 ET HE PREPRESS SHUTOFF VLV	GLWK2U01E	ON				
507-02		CMD	L02	A75086 ET HE SEC PREPRESS VLV OP	GLWK2U01E	OFF				
186-03		VFY	L02	HELIUM BUBBLING SUPPLY PRESS	GLWK2U01E	OFF				
186-02		VFY	L02	ET L02 TANK HE BUBBL DIFF PRESS	GLUP4134A	NOLO	125	PSIG	OR	5.1-5
186-01		VFY	L02	ET L02 TANK HE BUBBL DIFF PRESS	GLUP4144A	NOLO	.1	PSID	1 OF 3	5.1-5
186-04		VFY	L02	HE BUBBLING FLO CNTL VLV(PRI) OP	GLUP4544A	NOLO	.1	PSID	1 OF 3	5.1-5
186-05		VFY	L02	HE BUBBLING FLO CNTL VLV(SEC) OP	GLUX4143E	OFF			2 OF 2	5.1-5
110-35		ICL	L02	HE BUBBL FL CNTL VLV (SEC) OP	GLUX4043E	OFF			INHB MSEQ	5.1-5
110-34		K	ICL	A80503 FR FU PT743 PR	GMMP3U25A					
110-43		K	ICL	A80497 FR FU PT743 PR	GMMP3U29A					
110-36		K	ICL	A111727 LHR FU PT743 PR	GMMP31U3A					
110-41		K	ICL	A100531 PRT LHR FU PT743 PR	GMMP3113A					
110-42		K	ICL	A100523 PRT LHO FU PT743 PR	GMMP3115A					
110-50		K	ICL	A100533 PRT LHO FU PT743 PR	GMMP3124A					
110-45		K	ICL	A100571 PRT RHO FU PT743 PR	GMMP32U7A					
110-44		K	ICL	A101097 PRT RHO FU PT743 PR	GMMP3211A					
110-37		K	ICL	A100573 PRT RHR FU PT743 PR	GMMP3218A					
506-10		CMD	EPDC	A112269 RHR FU PT743 PR	GMMP3237A					
506-18		CMD	EPDC	SYS A CPA DC PWR OFF	GM3K11U3E	ON				
506-06		CMD	EPDC	SYS A CPA DC PWR OFF	GM3K11U3E	OFF				
506-14		CMD	EPDC	SYS A PIC RACK DC PWR OFF	GM3K11U8E	ON				
506-11		CMD	EPDC	SYS A PIC RACK DC PWR OFF	GM3K11U8E	OFF				
506-19		CMD	EPDC	SYS B CPA DC PWR OFF	GM3K21U3E	ON				
506-07		CMD	EPDC	SYS B PIC RACK DC PWR OFF	GM3K21U8E	ON				



SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
:	:	:	:	:	:	DESIGNATOR	SINGL	:	:	PAGE	:
:	CLOCK	E	:	:	:	:	OR LO	HIGH	UNIT	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:

506-15			CMD	EPDC	SYS B PIC RACK DC PWR OFF	GMSK21U8E	OFF				
228-00			CMD	EPDC	H2-BURN SYS A ARM	GMSK5U12E	ON				
315-00			CMD	EPDC	H2-BURN SYS A ARM	GMSK5U12E	OFF				
525-00			CMD	EPDC	H2-BURN SYS A ARM	GMSK5U12E	OFF				
289-00			CMD	EPDC	H2-BURN SYS A FIRE 1	GMSK5U13E	ON				
315-02			CMD	EPDC	H2-BURN SYS A FIRE 1	GMSK5U13E	OFF				
516-00			CMD	EPDC	H2-BURN SYS A FIRE 1	GMSK5U13E	OFF				
289-02			CMD	EPDC	H2-BURN SYS A FIRE 2	GMSK5U14E	ON				
315-04			CMD	EPDC	H2-BURN SYS A FIRE 2	GMSK5U14E	OFF				
516-02			CMD	EPDC	H2-BURN SYS A FIRE 2	GMSK5U14E	OFF				
506-12			CMD	EPDC	H2-BURN SYS A CPA DC PWR OFF	GMSK5U13E	ON				
506-20			CMD	EPDC	H2-BURN SYS A CPA DC PWR OFF	GMSK5U13E	OFF				
506-08			CMD	EPDC	H2-BURN SYS A PIC RACK DC PWR OFF	GMSK5U10E	ON				
506-16			CMD	EPDC	H2-BURN SYS A PIC RACK DC PWR OFF	GMSK5U10E	OFF				
228-01			CMD	EPDC	H2-BURN SYS B ARM	GMSK6U12E	ON				
315-01			CMD	EPDC	H2-BURN SYS B ARM	GMSK6U12E	OFF				
525-01			CMD	EPDC	H2-BURN SYS B ARM	GMSK6U12E	OFF				
289-01			CMD	EPDC	H2-BURN SYS B FIRE 1	GMSK6U13E	ON				
315-03			CMD	EPDC	H2-BURN SYS B FIRE 1	GMSK6U13E	OFF				
516-01			CMD	EPDC	H2-BURN SYS B FIRE 1	GMSK6U13E	OFF				
289-03			CMD	EPDC	H2-BURN SYS B FIRE 2	GMSK6U14E	ON				
315-05			CMD	EPDC	H2-BURN SYS B FIRE 2	GMSK6U14E	OFF				
516-03			CMD	EPDC	H2-BURN SYS B FIRE 2	GMSK6U14E	OFF				
506-13			CMD	EPDC	H2-BURN SYS B CPA DC PWR OFF	GMSK6U13E	ON				
506-21			CMD	EPDC	H2-BURN SYS B CPA DC PWR OFF	GMSK6U13E	OFF				
506-09			CMD	EPDC	H2-BURN SYS B PIC RACK DC PWR OFF	GMSK6U10E	ON				
506-17			CMD	EPDC	H2-BURN SYS B PIC RACK DC PWR OFF	GMSK6U10E	OFF				
277-00			CVFY	EPDC	SYS A RH SRB HDP M1 PIC CAP VOLT	GMSV13U1A	35.7	NOHI	V	1 OF 2	3.1-9
618-00			CVFY	EPDC	SYS A R4 SRB HDP M1 PIC CAP VOLT	GMSV13U1A	NOL0	1.5	V	DISPLAY	
277-02			CVFY	EPDC	SYS A RH SRB HDP M2 PIC CAP VOLT	GMSV13U2A	35.7	NOHI	V	1 OF 2	3.1-9
618-02			CVFY	EPDC	SYS A RH SRB HDP M2 PIC CAP VOLT	GMSV13U2A	NOL0	1.5	V	DISPLAY	
277-04			CVFY	EPDC	SYS A RH SRB HDP M3 PIC CAP VOLT	GMSV13U3A	35.7	NOHI	V	1 OF 2	3.1-9
618-04			CVFY	EPDC	SYS A RH SRB HDP M3 PIC CAP VOLT	GMSV13U3A	NOL0	1.5	V	DISPLAY	
277-06			CVFY	EPDC	SYS A RH SRB HDP M4 PIC CAP VOLT	GMSV13U4A	35.7	NOHI	V	1 OF 2	3.1-9
618-06			CVFY	EPDC	SYS A RH SRB HDP M4 PIC CAP VOLT	GMSV13U4A	NOL0	1.5	V	DISPLAY	
277-08			CVFY	EPDC	SYS A LH SRB HDP M5 PIC CAP VOLT	GMSV13U5A	35.7	NOHI	V	1 OF 2	3.1-9
618-08			CVFY	EPDC	SYS A LH SRB HDP M5 PIC CAP VOLT	GMSV13U5A	NOL0	1.5	V	DISPLAY	
277-10			CVFY	EPDC	SYS A LH SRB HDP M6 PIC CAP VOLT	GMSV13U6A	35.7	NOHI	V	1 OF 2	3.1-9
618-10			CVFY	EPDC	SYS A LH SRB HDP M6 PIC CAP VOLT	GMSV13U6A	NOL0	1.5	V	DISPLAY	
277-12			CVFY	EPDC	SYS A LH SRB HDP M7 PIC CAP VOLT	GMSV13U7A	35.7	NOHI	V	1 OF 2	3.1-9
618-12			CVFY	EPDC	SYS A LH SRB HDP M7 PIC CAP VOLT	GMSV13U7A	NOL0	1.5	V	DISPLAY	

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC						
:	CD	:	:	:	:	DESIGNATOR	SINGL	:	:	PAGE						
:	CLOCK	:	:	:	:	OR LO	HIGH	:	:	:						
:	:	:	:	:	:	:	UNIT	:	:	:						
277-14	CVFY	EPDC	SYS A	LH	SRB	HDP	M8	PIC	CAP	VOLT	GMSV13U8A	35.7	NOHI	V	1 OF 2	3.1-9
618-14	VFY	EPDC	SYS A	LH	SRB	HDP	M8	PIC	CAP	VOLT	GMSV13U8A	NOLO	1.5	V	DISPLAY	3.1-9
277-36	CVFY	EPDC	SYS A	LH2	TSM	PIC	CAP	VOLTS			GMSV13U9A	35.7	NOHI	V	1 OF 2	3.1-7
618-36	VFY	EPDC	SYS A	LH2	TSM	PIC	CAP	VOLTS			GMSV13U9A	NOLO	1.5	V	DISPLAY	3.1-7
277-38	CVFY	EPDC	SYS A	LQ2	TSM	PIC	CAP	VOLTS			GMSV13U4A	35.7	NOHI	V	1 OF 2	3.1-7
618-38	VFY	EPDC	SYS A	LQ2	TSM	PIC	CAP	VOLTS			GMSV13U4A	NOLO	1.5	V	DISPLAY	3.1-7
055-02	VFY	EPDC	SYS A	ETVAS	PIC	CAP	VOLTS				GMSV1311A	NOLO	1.5	V	1 OF 2	3.1-8
277-32	CVFY	EPDC	SYS A	ETVAS	PIC	CAP	VOLTS				GMSV1311A	35.7	NOHI	V	1 OF 2	3.1-8
618-32	VFY	EPDC	SYS A	ETVAS	PIC	CAP	VOLTS				GMSV1311A	NOLO	1.5	V	DISPLAY	3.1-6
041-00	CVFY	EPDC	SYS A	CPA	DC	VOLTAGE					GMSV1313A	26	NOHI	V	1 OF 2	3.1-9
277-16	VFY	EPDC	SYS B	RH	SRB	HDP	M1	PIC	CAP	VOLT	GMSV23U1A	35.7	NOHI	V	1 OF 2	3.1-9
618-16	VFY	EPDC	SYS B	RH	SRB	HDP	M1	PIC	CAP	VOLT	GMSV23U1A	NOLO	1.5	V	DISPLAY	3.1-9
277-18	CVFY	EPDC	SYS B	RH	SRB	HDP	M2	PIC	CAP	VOLT	GMSV23U2A	35.7	NOHI	V	1 OF 2	3.1-9
618-18	VFY	EPDC	SYS B	RH	SRB	HDP	M2	PIC	CAP	VOLT	GMSV23U2A	NOLO	1.5	V	DISPLAY	3.1-9
277-20	CVFY	EPDC	SYS B	RH	SRB	HDP	M3	PIC	CAP	VOLT	GMSV23U3A	35.7	NOHI	V	1 OF 2	3.1-9
618-20	VFY	EPDC	SYS B	RH	SRB	HDP	M3	PIC	CAP	VOLT	GMSV23U3A	NOLO	1.5	V	DISPLAY	3.1-9
277-22	CVFY	EPDC	SYS B	RH	SRB	HDP	M4	PIC	CAP	VOLT	GMSV23U4A	35.7	NOHI	V	1 OF 2	3.1-9
618-22	VFY	EPDC	SYS B	RH	SRB	HDP	M4	PIC	CAP	VOLT	GMSV23U4A	NOLO	1.5	V	DISPLAY	3.1-9
277-24	CVFY	EPDC	SYS B	LH	SRB	HDP	M5	PIC	CAP	VOLT	GMSV23U5A	35.7	NOHI	V	1 OF 2	3.1-9
618-24	VFY	EPDC	SYS B	LH	SRB	HDP	M5	PIC	CAP	VOLT	GMSV23U5A	NOLO	1.5	V	DISPLAY	3.1-9
277-26	CVFY	EPDC	SYS B	LH	SRB	HDP	M6	PIC	CAP	VOLT	GMSV23U6A	35.7	NOHI	V	1 OF 2	3.1-9
618-26	VFY	EPDC	SYS B	LH	SRB	HDP	M6	PIC	CAP	VOLT	GMSV23U6A	NOLO	1.5	V	DISPLAY	3.1-9
277-28	CVFY	EPDC	SYS B	LH	SRB	HDP	M7	PIC	CAP	VOLT	GMSV23U7A	35.7	NOHI	V	1 OF 2	3.1-9
618-28	VFY	EPDC	SYS B	LH	SRB	HDP	M7	PIC	CAP	VOLT	GMSV23U7A	NOLO	1.5	V	DISPLAY	3.1-9
277-30	CVFY	EPDC	SYS B	LH	SRB	HDP	M8	PIC	CAP	VOLT	GMSV23U8A	35.7	NOHI	V	1 OF 2	3.1-9
618-30	VFY	EPDC	SYS B	LH	SRB	HDP	M8	PIC	CAP	VOLT	GMSV23U8A	NOLO	1.5	V	DISPLAY	3.1-9
277-40	CVFY	EPDC	SYS B	LH2	TSM	PIC	CAP	VOLTS			GMSV23U9A	35.7	NOHI	V	1 OF 2	3.1-7
618-40	VFY	EPDC	SYS B	LH2	TSM	PIC	CAP	VOLTS			GMSV23U9A	NOLO	1.5	V	DISPLAY	3.1-7
277-42	CVFY	EPDC	SYS B	LQ2	TSM	PIC	CAP	VOLTS			GMSV2310A	35.7	NOHI	V	1 OF 2	3.1-7
618-42	VFY	EPDC	SYS B	LQ2	TSM	PIC	CAP	VOLTS			GMSV2310A	NOLO	1.5	V	DISPLAY	3.1-7
055-04	VFY	EPDC	SYS B	ETVAS	PIC	CAP	VOLTS				GMSV2311A	NOLO	1.5	V	1 OF 2	3.1-8
277-34	CVFY	EPDC	SYS B	ETVAS	PIC	CAP	VOLTS				GMSV2311A	35.7	NOHI	V	1 OF 2	3.1-8
618-34	VFY	EPDC	SYS B	ETVAS	PIC	CAP	VOLTS				GMSV2311A	NOLO	1.5	V	DISPLAY	3.1-6
041-02	CVFY	EPDC	SYS B	CPA	DC	VOLTAGE					GMSV2313A	26	NOHI	V	1 OF 2	3.1-9
277-01	CVFY	EPDC	SYS A	RH	HDP	M1	PIC	CAP	VOLT	RED	GMSV33U1A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
618-01	VFY	EPDC	SYS A	RH	HDP	M1	PIC	CAP	VOLT	RED	GMSV33U1A	NOLO	1.5	V	DISPLAY	3.1-9
277-03	CVFY	EPDC	SYS A	RH	HDP	M2	PIC	CAP	VOLT	RED	GMSV33U2A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
618-03	VFY	EPDC	SYS A	RH	HDP	M2	PIC	CAP	VOLT	RED	GMSV33U2A	NOLO	1.5	V	DISPLAY	3.1-9
277-05	CVFY	EPDC	SYS A	RH	HDP	M3	PIC	CAP	VOLT	RED	GMSV33U3A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
618-05	VFY	EPDC	SYS A	RH	HDP	M3	PIC	CAP	VOLT	RED	GMSV33U3A	NOLO	1.5	V	DISPLAY	3.1-9
277-07	CVFY	EPDC	SYS A	RH	HDP	M4	PIC	CAP	VOLT	RED	GMSV33U4A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9

SEQ	TIME	CD	FUNC	DISC	NOMENCLATURE	SYS	VAL	UNIT	FUNCTION	VALUE	DISP	DURATION	LCC	PAGE
:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	DESIGNATOR	OR LO	HIGH	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
618-07	VFY		EPDC		SYS A RH HDP M4 PIC CAP VOLT RED	GMSV33U4A	NOL0				DISPLAY	TIL MSRB 3.1-9		
277-09	CVFY		EPDC		SYS A LH HDP M5 PIC CAP VOLT RED	GMSV33U5A	35.7	NOHI			EXIT			
618-09	VFY		EPDC		SYS A LH HDP M5 PIC CAP VOLT RED	GMSV33U5A	NOL0				DISPLAY	TIL MSRB 3.1-9		
277-11	CVFY		EPDC		SYS A LH HDP M6 PIC CAP VOLT RED	GMSV33U6A	35.7	NOHI			EXIT			
618-11	VFY		EPDC		SYS A LH HDP M6 PIC CAP VOLT RED	GMSV33U6A	NOL0				DISPLAY	TIL MSRB 3.1-9		
277-13	CVFY		EPDC		SYS A LH HDP M7 PIC CAP VOLT RED	GMSV33U7A	35.7	NOHI			EXIT			
618-13	VFY		EPDC		SYS A LH HDP M7 PIC CAP VOLT RED	GMSV33U7A	NOL0				DISPLAY	TIL MSRB 3.1-9		
277-15	CVFY		EPDC		SYS A LH HDP M8 PIC CAP VOLT RED	GMSV33U8A	35.7	NOHI			EXIT			
618-15	VFY		EPDC		SYS A LH HDP M8 PIC CAP VOLT RED	GMSV33U8A	NOL0				DISPLAY	TIL MSRB 3.1-9		
277-37	CVFY		EPDC		SYS A LH2 TSM PIC CAP RED VOLTS	GMSV33U9A	35.7	NOHI			EXIT			
618-37	VFY		EPDC		SYS A LH2 TSM PIC CAP RED VOLTS	GMSV33U9A	NOL0				DISPLAY	TIL MSRB 3.1-7		
277-39	CVFY		EPDC		SYS A L02 TSM PIC CAP RED VOLTS	GMSV33U9A	35.7	NOHI			EXIT			
618-39	VFY		EPDC		SYS A L02 TSM PIC CAP RED VOLTS	GMSV33U9A	NOL0				DISPLAY	TIL MSRB 3.1-7		
055-03	VFY		EPDC		SYS A ETVAS PIC CAP RED VOLTS	GMSV33U9A	35.7	NOHI			EXIT			
277-33	CVFY		EPDC		SYS A ETVAS PIC CAP RED VOLTS	GMSV33U9A	NOL0				DISPLAY	TIL MSRB 3.1-7		
618-33	VFY		EPDC		SYS A ETVAS PIC CAP RED VOLTS	GMSV33U9A	35.7	NOHI			EXIT			
041-01	CVFY		EPDC		SYS A CPA DC RED VOLTAGE	GMSV33U9A	26	NOHI			INHB M009			
277-17	CVFY		EPDC		SYS B RH HDP M1 PIC CAP VOLT RED	GMSV43U1A	35.7	NOHI			EXIT			
618-17	VFY		EPDC		SYS B RH HDP M1 PIC CAP VOLT RED	GMSV43U1A	NOL0				DISPLAY	TIL MSRB 3.1-6		
277-19	CVFY		EPDC		SYS B RH HDP M2 PIC CAP VOLT RED	GMSV43U2A	35.7	NOHI			EXIT			
618-19	VFY		EPDC		SYS B RH HDP M2 PIC CAP VOLT RED	GMSV43U2A	NOL0				DISPLAY	TIL MSRB 3.1-9		
277-21	CVFY		EPDC		SYS B RH HDP M3 PIC CAP VOLT RED	GMSV43U3A	35.7	NOHI			EXIT			
618-21	VFY		EPDC		SYS B RH HDP M3 PIC CAP VOLT RED	GMSV43U3A	NOL0				DISPLAY	TIL MSRB 3.1-9		
277-23	CVFY		EPDC		SYS B RH HDP M4 PIC CAP VOLT RED	GMSV43U4A	35.7	NOHI			EXIT			
618-23	VFY		EPDC		SYS B RH HDP M4 PIC CAP VOLT RED	GMSV43U4A	NOL0				DISPLAY	TIL MSRB 3.1-9		
277-25	CVFY		EPDC		SYS B LH HDP M5 PIC CAP VOLT RED	GMSV43U5A	35.7	NOHI			EXIT			
618-25	VFY		EPDC		SYS B LH HDP M5 PIC CAP VOLT RED	GMSV43U5A	NOL0				DISPLAY	TIL MSRB 3.1-9		
277-27	CVFY		EPDC		SYS B LH HDP M6 PIC CAP VOLT RED	GMSV43U6A	35.7	NOHI			EXIT			
618-27	VFY		EPDC		SYS B LH HDP M6 PIC CAP VOLT RED	GMSV43U6A	NOL0				DISPLAY	TIL MSRB 3.1-9		
277-29	CVFY		EPDC		SYS B LH HDP M7 PIC CAP VOLT RED	GMSV43U7A	35.7	NOHI			EXIT			
618-29	VFY		EPDC		SYS B LH HDP M7 PIC CAP VOLT RED	GMSV43U7A	NOL0				DISPLAY	TIL MSRB 3.1-9		
277-31	CVFY		EPDC		SYS B LH HDP M8 PIC CAP VOLT RED	GMSV43U8A	35.7	NOHI			EXIT			
618-31	VFY		EPDC		SYS B LH HDP M8 PIC CAP VOLT RED	GMSV43U8A	NOL0				DISPLAY	TIL MSRB 3.1-9		
277-41	CVFY		EPDC		SYS B LH2 TSM PIC CAP RED VOLTS	GMSV43U9A	35.7	NOHI			EXIT			
618-41	VFY		EPDC		SYS B LH2 TSM PIC CAP RED VOLTS	GMSV43U9A	NOL0				DISPLAY	TIL MSRB 3.1-7		
277-43	CVFY		EPDC		SYS B L02 TSM PIC CAP RED VOLTS	GMSV43U9A	35.7	NOHI			EXIT			
618-43	VFY		EPDC		SYS B L02 TSM PIC CAP RED VOLTS	GMSV43U9A	NOL0				DISPLAY	TIL MSRB 3.1-7		
055-05	VFY		EPDC		SYS B ETVAS PIC CAP RED VOLTS	GMSV43U9A	35.7	NOHI			EXIT			
277-35	CVFY		EPDC		SYS B ETVAS PIC CAP RED VOLTS	GMSV43U9A	NOL0				DISPLAY	TIL MSRB 3.1-8		
618-35	VFY		EPDC		SYS B ETVAS PIC CAP RED VOLTS	GMSV43U9A	35.7	NOHI			EXIT			
041-03	CVFY		EPDC		SYS B CPA DC RED VOLTAGE	GMSV43U9A	26	NOHI			INHB MSRB			

DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S9005 - L :

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
CD	T	:	:	:	:	DESIGNATOR	SINGL	:	:	PAGE
CLOCK	E	:	:	:	:	OR	LO:HIGH	UNIT	:	:

231-02		K	CVFY	EPDC	H2 BURN SYS A ENG 2 CAP	GMSV53U9A	35.7	NOHI	V	1 OF 2	3.1-11
231-04		K	CVFY	EPDC	H2 BURN SYS A ENG 3 CAP	GMSV53U9A	35.7	NOHI	V	1 OF 2	3.1-11
231-00		K	CVFY	EPDC	H2 BURN SYS A ENG 1 CAP	GMSV53U9A	35.7	NOHI	V	1 OF 2	3.1-11
041-04		K	CVFY	EPDC	H2 - BURN SYS A CPA DC VOLTS	GMSV53U9A	26	NOHI	V	1 OF 2	3.1-11
040-12		K	CVFY	CEPDC	RBUS SYSA PIC CAP VOLTS	GMSV53U9A	NOLO	1.5	V	1 OF 2	3.1-10
231-06		K	CVFY	CEPDC	RBUS SYSA PIC CAP VOLTS	GMSV53U9A	35.7	NOHI	V	1 OF 2	
618-44		K	VFY	CEPDC	RBUS SYSA PIC CAP VOLTS	GMSV53U9A	NOLO	1.5	V	DISPLAY	
231-03		K	CVFY	EPDC	H2 BURN SYS B ENG 2 CAP	GMSV63U9A	35.7	NOHI	V	INHB MSEQ	3.1-11
231-05		K	CVFY	EPDC	H2 BURN SYS B ENG 3 CAP	GMSV63U9A	35.7	NOHI	V	INHB MSEQ	3.1-11
231-01		K	CVFY	EPDC	H2 BURN SYS B ENG 1 CAP	GMSV63U9A	35.7	NOHI	V	INHB MSEQ	3.1-11
041-06		K	CVFY	EPDC	H2 - BURN SYS B CPA DC VOLTS	GMSV63U9A	26	NOHI	V	1 OF 2	3.1-10
040-14		K	CVFY	CEPDC	RBUS SYSB PIC CAP VOLTS	GMSV63U9A	NOLO	1.5	V	1 OF 2	
231-08		K	CVFY	CEPDC	RBUS SYSB PIC CAP VOLTS	GMSV63U9A	35.7	NOHI	V	1 OF 2	
618-46		K	VFY	CEPDC	RBUS SYSB PIC CAP VOLTS	GMSV63U9A	NOLO	1.5	V	1 OF 2	
041-05		K	CVFY	EPDC	H2 - BURN SYS A CPA DC RED VOLTS	GMSV73U9A	26	NOHI	V	DISPLAY	
040-13		K	CVFY	CEPDC	RBUS SYSA PIC CAP VOLTS	GMSV73U9A	NOLO	1.5	V	INHB MSEQ	3.1-10
231-07		K	CVFY	CEPDC	RBUS SYSA PIC CAP VOLTS	GMSV73U9A	35.7	NOHI	V	INHB MLH2	
618-45		K	VFY	CEPDC	RBUS SYSA PIC CAP VOLTS	GMSV73U9A	NOLO	1.5	V	INHB MSRB	
041-07		K	CVFY	EPDC	H2 - BURN SYS B CPA DC RED VOLTS	GMSV73U9A	26	NOHI	V	DISPLAY	
040-15		K	CVFY	CEPDC	RBUS SYSB PIC CAP VOLTS	GMSV63U9A	NOLO	1.5	V	INHB MSEQ	3.1-10
231-09		K	CVFY	CEPDC	RBUS SYSB PIC CAP VOLTS	GMSV63U9A	35.7	NOHI	V	INHB MLH2	
618-47		K	VFY	CEPDC	RBUS SYSB PIC CAP VOLTS	GMSV63U9A	NOLO	1.5	V	INHB MSRB	
310-00	ST290		VFY		SYSTEM A HDP T-0 BUS ON	GMSX11U7E	ON			DISPLAY	
310-01			VFY		SYSTEM B HDP T-0 BUS ON	GMSX21U7E	ON			2 OF 3	
110-39		K	ICL	HYOX	A80504 FR OX PT742 PR	GMSV3U25A				2 OF 3	
110-38		K	ICL	HYOX	A80498 FR OX PT742 PR	GMSV3U25A					
110-48		K	ICL	HYOX	A111728 RHR OX PT742 PR	GMSV3U29A					
110-40		K	ICL	HYOX	A100532 PRT RHO OX PT742 PR	GMSV31U9A					
110-46		K	ICL	HYOX	A100524 PRT RHO OX PT742 PR	GMSV31U9A					
110-47		K	ICL	HYOX	A100534 PRT RHO OX PT742 PR	GMSV31U9A					
110-53		K	ICL	HYOX	A100572 PRT LHO OX PT742 PR	GMSV31U9A					
110-52		K	ICL	HYOX	A101098 PRT LHO OX PT742 PR	GMSV31U9A					
110-51		K	ICL	HYOX	A100574 PRT LHO OX PT742 PR	GMSV31U9A					
110-49		K	ICL	HYOX	A112270 LHR OX PT742 PR	GMSV31U9A					
			CMD	INTG	SWITCH ALT SOURCE RF/HIGH RATE	GPCA					
118-00			CMON	BRS	RANGE SAFETY LAUNCH PROCEED					1 OF 2	
284-00			ACL	BRS	RSS OK TO LAUNCH IND NO. 1	GMSX21U0E	ON				
322-00			IGL	BRS	INHIBIT GOAL NOTIFICATION	GMSX21U0E	*				
			CRSY	BRS	RANGE SAFETY LAUNCH PROCEED	GMSX21U0E					
118-01			CMON	BRS	RANGE SAFETY LAUNCH PROCEED	GMSX21U0E	ON				
			ACL	BRS	RSS OK TO LAUNCH IND NO. 2	GMSX21U0E					

RSS HOLD TIL MENG

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	SINGL	VALUE	ELSE	DURATION	LCC	PAGE
:	:	:	:	:	:	:	:	:	:	:	:	:
:	CD	T	:	:	:	:	:	:	:	:	:	:
:	CLOCK	E	:	:	:	:	OR LO	HIGH	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:

284-01		IGL	BRS		INHIBIT GOAL NOTIFICATION	GRSX21U2E	*					
322-01		CRSY	BRS		RANGE SAFETY LAUNCH PROCEED	GKXZ1U2E						
018-06		VFY	BRS		SYS B ENCODER RELAY ENABLE IND	GRSX2124E	OFF			GTO ST005		
018-05		VFY	BRS		SYS A ENCODER RELAY EVABLE IND	GRSX213UE	OFF			7 OF 7		
145-02		K	VFY	ARMS	OAA POSITION INDICATION	6SAH7831A	N0LO	2	DEG	1 OF 4		3.1-16
901-02		K	CVFY	ARMS	KARMS RETRACTED POSITION SWITCH	6SAH7831A	N0LO	2	DEG	1 OF 4		3.1-16
145-03		K	VFY	ARMS	OAA POSITION INDICATOR	6SAH7836A	N0LO	2	DEG	INH3 MSEQ		3.1-16
901-03		K	CVFY	ARMS	OAA POSITION INDICATOR	6SAH7836A	N0LO	2	DEG	INH3 MSEQ		3.1-16
245-02		K	VFY	ARMS	A133566 ARM POSITION INDICATION	6SAH8191A	N0LO	2	DEG	INH3 MSEQ		3.1-17
245-52		V	VFY	G0X	A151111 ARM POS IND	6SAH8191A	N0LO	2	DEG	1 OF 6		
834-02		A	VFY	G0X	A133566 ARM POSITION INDICATION	6SAH8191A	N0LO	2	DEG	GTO S50		
837-02		A	VFY	G0X	A133566 ARM POSITION INDICATION	6SAH8191A	N0LO	2	DEG	INH3 MSEQ		
850-02		B	VFY	G0X	A133566 ARM POSITION INDICATION	6SAH8191A	N0LO	2	DEG	GTO S150		
864-02		B	VFY	G0X	A133566 ARM POSITION INDICATION	6SAH8191A	N0LO	2	DEG	INH3 MSEQ		
889-02		V	VFY	G0X	A151111 ARM POS IND	6SAH8191A	N0LO	2	DEG	1 OF 6		
892-02		V	VFY	G0X	A151111 ARM POS IND	6SAH8191A	N0LO	2	DEG	1 OF 6		
245-55		V	VFY	G0X	A151111 ARM POS IND	6SAH8196A	N0LO	2	DEG	INH3 MSEQ		
889-05		V	VFY	G0X	A151111 ARM POS IND	6SAH8196A	N0LO	2	DEG	GTO S50		
892-05		V	VFY	G0X	A151111 ARM POS IND	6SAH8196A	N0LO	2	DEG	INH3 MSEQ		
823-02		A	VFY	G0X	A133716 HOOD POSITION INDICATION	6SAH8531A	5	NOHI	DEG	GTO S20		
824-01		A	VFY	G0X	A133716 HOOD POSITION INDICATOR	6SAH8531A	45	NOHI	DEG	2 OF 3		
846-03		B	VFY	G0X	A133716 HOOD POSITION INDICATOR	6SAH8531A	5	NOHI	DEG	GTO S120		
847-02		B	VFY	G0X	A133716 HOOD POSITION INDICATOR	6SAH8531A	45	NOHI	DEG	2 OF 4		
873-03		V	VFY	G0X	A133715 HOOD POS INDICATOR	6SAH8531A	5	NOHI	DEG	1 OF 8		
874-03		V	VFY	G0X	A133715 HOOD POS IND	6SAH8531A	45	NOHI	DEG	GTO S16		
879-03		V	VFY	G0X	A133715 HOOD POS IND	6SAH8531A	45	NOHI	DEG	GTO S26		
828-01		A	VFY	G0X	A133716 HOOD POSITION INDICATOR	6SAH8536A	45	NOHI	DEG	2 OF 3		
854-02		B	VFY	G0X	A133715 HOOD POSITION INDICATOR	6SAH8536A	45	NOHI	DEG	2 OF 4		
873-07		V	VFY	G0X	A133716 HOOD POS INDICATOR	6SAH8536A	5	NOHI	DEG	GTO S20		
875-07		V	VFY	G0X	A133716 HOOD POS IND	6SAH8536A	45	NOHI	DEG	GTO S15		
879-07		V	VFY	G0X	A133715 HOOD POS IND	6SAH8536A	45	NOHI	DEG	GTO S25		
882-00	S30	V	CMD	G0X	A LOCK PRI EXTEND LOCK VLV	6SAK6U0UE	OFF					
885-04		V	CMD	G0X	A LOCK PRI EXTEND LOCK VLV	6SAK6U0UE	ON					
882-02		V	CMD	G0X	A LOCK PRI EXTEND LOCK VLV	6SAK6U0UE	OFF					
885-06		V	CMD	G0X	A LOCK PRI EXTEND LOCK VLV	6SAK6U0UE	ON					
883-00		V	CMD	G0X	UNLOCK PRI EXTEND LOCK VLV	6SAK6J1UE	ON					
885-00		V	CMD	G0X	UNLOCK PRI EXTEND LOCK VLV	6SAK6J1UE	ON					
883-02	S32	V	CMD	G0X	UNLOCK PRI EXTEND LOCK VLV	6SAK6U15E	ON					
885-02		V	CMD	G0X	UNLOCK PRI EXTEND LOCK VLV	6SAK6U15E	OFF					
882-01		V	CMD	G0X	A LOCK SEC EXTEND LOCK VLV	6SAK6U2UE	OFF					
885-05		V	CMD	G0X	A LOCK SEC EXTEND LOCK VLV	6SAK6U2UE	ON					

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SEQ	TIME	CD	CLOCK	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE	S
:	:	:	:	:	:	:	:	DESIGNATOR	SINGL	:	:	:	:	:
:	:	:	:	:	:	:	:	:	OR LO	HIGH	UNIT	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
882-03	V	CMD			GOX		A LOCK SEC EXTEND LOCK VLV	GS AK6J25E	OFF					
885-07	V	CMD			GOX		A LOCK SEC EXTEND LOCK VLV	GS AK6U25E	ON					
883-01	V	CMD			GOX		UNLOCK SEC EXTEND LOCK VLV	GS AK6J3DE	ON					
885-01	V	CMD			GOX		UNLOCK SEC EXTEND LOCK VLV	GS AK6U3UE	OFF					
883-03	V	CMD			GOX		UNLOCK SEC EXTEND LOCK VLV	GS AK6U35E	ON					
885-03	V	CMD			GOX		UNLOCK SEC EXTEND LOCK VLV	GS AK6J35E	OFF					
549-00	K	CMD			ARMS		AAA OPEN ACCUM CHARGING V	GS AK7U8UE	ON					
632-00	K	CMD			ARMS		AAA OPEN ACCUM CHARGING	GS AK7U8UE	OFF					
902-00	K	CMD			ARMS	ST20	AAA OPEN ACCUM CHARGING V	GS AK7J8UE	ON					
905-00	K	CMD			ARMS	ST40	AAA OPEN ACCUM CHARGING V	GS AK7U8UE	OFF					
549-01	K	CMD			ARMS		AAA OPEN ACCUM CHARGING V	GS AK7J85E	ON					
632-01	K	CMD			ARMS		AAA OPEN ACCUM CHARGING	GS AK7U85E	OFF					
902-01	K	CMD			ARMS		AAA OPEN ACCUM CHARGING V	GS AK7U85E	ON					
905-01	K	CMD			ARMS		AAA OPEN ACCUM CHARGING V	GS AK7U85E	OFF					
132-08	K	CMD			ARMS		AAA CLOSE GN2 INHIBIT V	GS AK710UE	ON					
545-00	K	CMD			ARMS		AAA CLOSE GN2 INHIBIT V	GS AK710UE	ON					
632-02	K	CMD			ARMS		AAA CLOSE GN2 INHIBIT V	GS AK710UE	ON					
907-00	K	CMD			ARMS		AAA CLOSE GN2 INHIBIT V	GS AK710UE	OFF					
132-09	K	CMD			ARMS	ST50	AAA CLOSE GN2 INHIBIT V	GS AK7105E	ON					
545-01	K	CMD			ARMS		AAA CLOSE GN2 INHIBIT V	GS AK7105E	ON					
632-03	K	CMD			ARMS		AAA CLOSE GN2 INHIBIT V	GS AK7105E	OFF					
907-01	K	CMD			ARMS		AAA CLOSE GN2 INHIBIT V	GS AK7105E	OFF					
128-00	K	CMD			ARMS		AAA UNLOCK PRI EXTEND LOCK V	GS AK712UE	ON					
547-00	K	CMD			ARMS		AAA UNLOCK PRI EXTEND LOCK V	GS AK712UE	ON					
625-00	K	CMD			ARMS		AAA UNLOCK PRI EXT LOCK VLV	GS AK712UE	OFF					
900-00	K	CMD			ARMS		AAA UNLOCK PRI EXTEND LOCK V	GS AK712UE	OFF					
128-02	K	CMD			ARMS		AAA UNLOCK PRI EXTEND LOCK V	GS AK7125E	ON					
547-01	K	CMD			ARMS		AAA UNLOCK PRI EXTEND LOCK V	GS AK7125E	ON					
625-01	K	CMD			ARMS		AAA UNLOCK PRI EXTEND LOCK V	GS AK7125E	OFF					
900-01	K	CMD			ARMS		AAA UNLOCK PRI EXT LOCK VLV	GS AK7125E	OFF					
125-03	K	CMD			ARMS		A LOCK PRI EXTEND LOCK VLV	GS AK713UE	OFF					
546-00	K	CMD			ARMS		AAA LOCK PRI EXTEND LOCK V	GS AK713UE	OFF					
626-00	K	CMD			ARMS		AAA LOCK PRI EXT LOCK VLV	GS AK713UE	ON					
629-00	K	CMD			ARMS		AAA LOCK PRI EXT LOCK VLV	GS AK713UE	ON					
125-02	K	CMD			ARMS		A LOCK PRI EXTEND LOCK VLV	GS AK7135E	OFF					
546-01	K	CMD			ARMS		AAA LOCK PRI EXTEND LOCK V	GS AK7135E	OFF					
626-01	K	CMD			ARMS		AAA LOCK PRI EXT LOCK VLV	GS AK7135E	ON					
629-01	K	CMD			ARMS		AAA LOCK PRI EXT LOCK VLV	GS AK7135E	OFF					
128-01	K	CMD			ARMS		AAA UNLOCK SEC EXTEND LOCK V	GS AK714UE	ON					
547-02	K	CMD			ARMS		AAA UNLOCK SEC EXTEND LOCK V	GS AK714UE	ON					
625-02	K	CMD			ARMS		AAA UNLOCK SEC EXT LOCK VLV	GS AK714UE	OFF					

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SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
:S	:T	:C	:D	:E		:SINGL	:HIGH	:UNIT			
:S	:T	:C	:D	:E		:SINGL	:HIGH	:UNIT			
9J0-02	K	CMD	ARMS	AAA	UNLOCK SEC EXTEND LOCK V	GS AK714UE	OFF				
128-03	K	CMD	ARMS	AAA	UNLOCK SEC EXTEND LOCK V	GS AK7145E	ON				
547-03	K	CMD	ARMS	AAA	UNLOCK SEC EXTEND LOCK V	GS AK7145E	ON				
625-03	K	CMD	ARMS	AAA	UNLOCK SEC EXT LOCK VLV	GS AK7145E	OFF				
900-03	K	CMD	ARMS	AAA	UNLOCK SEC EXTEND LOCK V	GS AK7145E	OFF				
126-01	K	CMD	ARMS	A	LOCK SEC EXTEND LOCK VLV	GS AK7150E	OFF				
546-02	K	CMD	ARMS	AAA	LOCK SEC EXTEND LOCK V	GS AK7150E	OFF				
626-02	K	CMD	ARMS	AAA	LOCK SEC EXT LOCK VLV	GS AK7150E	ON				
629-02	K	CMD	ARMS	AAA	LOCK SEC EXT LOCK VLV	GS AK7150E	OFF				
126-03	K	CMD	ARMS	A	LOCK SEC EXTEND LOCK VLV	GS AK7155E	OFF				
546-03	K	CMD	ARMS	AAA	LOCK SEC EXTEND LOCK V	GS AK7155E	OFF				
626-03	K	CMD	ARMS	AAA	LOCK SEC EXT LOCK VLV	GS AK7155E	OFF				
629-03	K	CMD	ARMS	AAA	LOCK SEC EXT LOCK VLV	GS AK7155E	ON				
541-00	K	CMD	ARMS	AAA	RESET PRI EXTEND PILOT V	GS AK7155E	OFF				
628-00	K	CMD	ARMS	AAA	PRI RESET EXT PILOT VLV	GS AK7160E	OFF				
630-00	K	CMD	ARMS	AAA	PRI RESET EXT PILOT VLV	GS AK7160E	ON				
541-01	K	CMD	ARMS	AAA	RESET PRI EXTEND PILOT V	GS AK7160E	OFF				
628-01	K	CMD	ARMS	AAA	PRI RESET EXT PILOT VLV	GS AK7165E	OFF				
630-01	K	CMD	ARMS	AAA	PRI RESET EXT PILOT VLV	GS AK7165E	ON				
548-01	K	CMD	ARMS	AAA	OPEV PRI EXTEND PILOT V	GS AK7170E	OFF				
627-00	K	CMD	ARMS	AAA	PRI OPEN EXT PILOT VLV	GS AK7170E	OFF				
548-01	K	CMD	ARMS	AAA	OPEV PRI EXTEND PILOT V	GS AK7175E	ON				
527-01	K	CMD	ARMS	AAA	PRI OPEN EXT PILOT VLV	GS AK7175E	OFF				
541-02	K	CMD	ARMS	AAA	RESET SEC EXTEND PILOT V	GS AK7180E	OFF				
628-02	K	CMD	ARMS	AAA	SEC RESET EXT PILOT VLV	GS AK7180E	ON				
630-02	K	CMD	ARMS	AAA	SEC RESET EXT PILOT VLV	GS AK7180E	OFF				
541-03	K	CMD	ARMS	AAA	RESET SEC EXTEND PILOT V	GS AK7185E	OFF				
628-03	K	CMD	ARMS	AAA	SEC RESET EXT PILOT VLV	GS AK7185E	ON				
630-03	K	CMD	ARMS	AAA	SEC RESET EXT PILOT VLV	GS AK7185E	OFF				
548-02	K	CMD	ARMS	AAA	OPEN SEC EXTEND PILOT V	GS AK7190E	ON				
627-02	K	CMD	ARMS	AAA	SEC OPEN EXT PILOT VLV	GS AK7190E	OFF				
548-03	K	CMD	ARMS	AAA	OPEN SEC EXTEND PILOT V	GS AK7195E	ON				
627-03	K	CMD	ARMS	AAA	SEC OPEN EXT PILOT VLV	GS AK7195E	OFF				
542-00	K	CMD	ARMS	AAA	CLOSE PRI RETRACT SUPPLY V	GS AK7200E	ON				
630-04	K	CMD	ARMS	AAA	CLOSE PRI RETRACT SUPPLY VLV	GS AK7200E	OFF				
896-00	K	CMD	ARMS	AAA	RESET PRI RETRACT SUPPLY VLV	GS AK7200E	ON				
899-00	K	CMD	ARMS	AAA	RESET PRI RETRACT SUPPLY VLV	GS AK7200E	OFF				
542-01	K	CMD	ARMS	AAA	CLOSE PRI RETRACT SUPPLY V	GS AK7205E	ON				
630-05	K	CMD	ARMS	AAA	CLOSE PRI RETRACT SUPPLY VLV	GS AK7205E	OFF				
896-01	K	CMD	ARMS	AAA	RESET PRI RETRACT SUPPLY VLV	GS AK7205E	ON				
899-01	K	CMD	ARMS	AAA	RESET PRI RETRACT SUPPLY VLV	GS AK7205E	OFF				

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI S9005 - L

DATE 12-10-85

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
:	CD	:	:	:	:	DESIGNATOR	SINGL	:	:	PAGE	:
:	CLOCK	:	:	:	:	OR LO	HIGH	UNIT	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:

135-00	K	CMD	ARMS	AAA	OPEV	PRI	RETRACT	SUPPLY	V	GSAK721UE	ON	
539-00	K	CMD	ARMS	AAA	OPEN	PRI	RETRACT	SUPPLY	V	GSAK721UE	OFF	
895-00	K	CMD	ARMS	AAA	OPEN	PRI	RETRACT	SUPPLY	V	GSAK721UE	OFF	
135-02	K	CMD	ARMS	AAA	OPEV	PRI	RETRACT	SUPPLY	V	GSAK7215E	ON	
539-01	K	CMD	ARMS	AAA	OPEN	PRI	RETRACT	SUPPLY	V	GSAK7215E	OFF	
895-01	K	CMD	ARMS	AAA	OPEN	PRI	RETRACT	SUPPLY	V	GSAK7215E	OFF	
542-02	K	CMD	ARMS	AAA	CLOSE	PRI	RETRACT	RETURN	V	GSAK722UE	ON	
630-06	K	CMD	ARMS	AAA	CLOSE	PRI	RETRACT	RET	VLV	GSAK722UE	OFF	
896-04	K	CMD	ARMS	AAA	RESET	PRI	RETRACT	RETURN	VLV	GSAK722UE	ON	
899-04	K	CMD	ARMS	AAA	RESET	PRI	RETRACT	RETURN	VLV	GSAK722UE	OFF	
542-03	K	CMD	ARMS	AAA	CLOSE	PRI	RETRACT	RETURN	V	GSAK7225E	ON	
630-07	K	CMD	ARMS	AAA	CLOSE	PRI	RETRACT	RET	VLV	GSAK7225E	OFF	
896-05	K	CMD	ARMS	AAA	RESET	PRI	RETRACT	RETURN	VLV	GSAK7225E	ON	
899-05	K	CMD	ARMS	AAA	RESET	PRI	RETRACT	RETURN	VLV	GSAK7225E	OFF	
135-04	K	CMD	ARMS	AAA	OPEV	PRI	RETRACT	RETURN	V	GSAK723UE	ON	
539-02	K	CMD	ARMS	AAA	OPEN	PRI	RETRACT	RETURN	V	GSAK723UE	OFF	
895-02	K	CMD	ARMS	AAA	OPEV	PRI	RETRACT	RETURN	V	GSAK723UE	OFF	
135-05	K	CMD	ARMS	AAA	OPEV	PRI	RETRACT	RETURN	V	GSAK7235E	ON	
539-03	K	CMD	ARMS	AAA	OPEN	PRI	RETRACT	RETURN	V	GSAK7235E	OFF	
895-03	K	CMD	ARMS	AAA	OPEV	PRI	RETRACT	RETURN	V	GSAK7235E	OFF	
543-00	K	CMD	ARMS	AAA	CLOSE	SEC	RETRACT	SUPPLY	V	GSAK724UE	ON	
630-08	K	CMD	ARMS	AAA	CLOSE	PRI	RETRACT	SUP	VLV	GSAK724UE	OFF	
896-02	K	CMD	ARMS	AAA	RESET	SEC	RETRACT	SUPPLY	VLV	GSAK724UE	ON	
899-02	K	CMD	ARMS	AAA	RESET	SEC	RETRACT	SUPPLY	VLV	GSAK724UE	OFF	
543-01	K	CMD	ARMS	AAA	CLOSE	SEC	RETRACT	SUPPLY	V	GSAK7245E	ON	
630-09	K	CMD	ARMS	AAA	CLOSE	PRI	RETRACT	SUP	VLV	GSAK7245E	OFF	
895-03	K	CMD	ARMS	AAA	RESET	SEC	RETRACT	SUPPLY	VLV	GSAK7245E	ON	
899-03	K	CMD	ARMS	AAA	RESET	SEC	RETRACT	SUPPLY	VLV	GSAK7245E	OFF	
135-01	K	CMD	ARMS	AAA	OPEV	SEC	RETRACT	SUPPLY	V	GSAK725UE	ON	
540-00	K	CMD	ARMS	AAA	OPEV	SEC	RETRACT	SUPPLY	V	GSAK725UE	OFF	
895-04	K	CMD	ARMS	AAA	OPEN	SEC	RETRACT	SUPPLY	V	GSAK725UE	OFF	
135-03	K	CMD	ARMS	AAA	OPEN	SEC	RETRACT	SUPPLY	V	GSAK7255E	ON	
540-01	K	CMD	ARMS	AAA	OPEN	SEC	RETRACT	SUPPLY	V	GSAK7255E	OFF	
895-05	K	CMD	ARMS	AAA	OPEN	SEC	RETRACT	SUPPLY	V	GSAK7255E	OFF	
543-02	K	CMD	ARMS	AAA	CLOSE	SEC	RETRACT	RETURN	V	GSAK726UE	ON	
630-10	K	CMD	ARMS	AAA	CLOSE	PRI	RETRACT	RET	VLV	GSAK726UE	OFF	
895-06	K	CMD	ARMS	AAA	RESET	SEC	RETRACT	RETURN	VLV	GSAK726UE	ON	
899-06	K	CMD	ARMS	AAA	RESET	SEC	RETRACT	RETURN	VLV	GSAK726UE	OFF	
543-03	K	CMD	ARMS	AAA	CLOSE	SEC	RETRACT	RETURN	V	GSAK7265E	ON	
630-11	K	CMD	ARMS	AAA	CLOSE	PRI	RETRACT	RET	VLV	GSAK7265E	OFF	
896-07	K	CMD	ARMS	AAA	RESET	SEC	RETRACT	RETURN	VLV	GSAK7265E	ON	



GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI S9005 - L

DATE 12-10-85

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S	
:	CD	:	:	:	:	DESIGNATOR	SINGL	:	:	OR LO	HIGH	UNIT
:	LOCK	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:

899-07	K	CMD	ARMS	00A	RESET SEC RETRACT RETURN VLV	GS AK7265E	OFF					
135-05	K	CMD	ARMS	00A	OPEN SEC RETRACT RETURN V	GS AK7270E	ON					
540-02	K	CMD	ARMS	00A	OPEN SEC RETRACT RETURN V	GS AK7270E	OFF					
895-06	K	CMD	ARMS	00A	OPEN SEC RETRACT RETURN V	GS AK7270E	OFF					
135-07	K	CMD	ARMS	00A	OPEN SEC RETRACT RETURN V	GS AK7275E	ON					
540-03	K	CMD	ARMS	00A	OPEN SEC RETRACT RETURN V	GS AK7275E	OFF					
895-07	K	CMD	ARMS	00A	OPEN SEC RETRACT RETURN V	GS AK7275E	OFF					
312-02	K	CMD	ARMS	00A	LATCHBACK SPLY VALVE-LATCH	GS AK7300E	ON					
314-00	K	CMD	ARMS	00A	LATCHBACK SPLY VLV-LATCH	GS AK7300E	OFF					
312-00	K	CMD	ARMS	00A	LATCHBACK SPLY VLV-LTCH ENAB	GS AK7301E	ON					
314-01	K	CMD	ARMS	00A	LATCHBACK SPLY VLV-LTCH ENAB	GS AK7301E	OFF					
312-03	K	CMD	ARMS	00A	LATCHBACK SPLY VALVE-LATCH	GS AK7305E	ON					
314-01	K	CMD	ARMS	00A	LATCHBACK SPLY VLV-LATCH	GS AK7305E	OFF					
312-01	K	CMD	ARMS	00A	LATCHBACK SPLY VLV-LTCH ENAB	GS AK7306E	ON					
314-03	K	CMD	ARMS	00A	LATCHBACK SPLY VLV-LTCH ENAB	GS AK7306E	OFF					
128-04	K	CMD	ARMS	00A	LCH3ACK SPLY V UNLATCH	GS AK7310E	ON					
130-00	K	CMD	ARMS	00A	LCH3ACK SPLY V UNLATCH	GS AK7310E	OFF					
544-00	K	CMD	ARMS	00A	LCH3ACK SPLY V UNLATCH	GS AK7315E	ON					
549-02	K	CMD	ARMS	00A	LCH3ACK SPLY V UNLATCH	GS AK7315E	OFF					
128-05	K	CMD	ARMS	00A	LCH3ACK SPLY V UNLATCH	GS AK7315E	ON					
130-01	K	CMD	ARMS	00A	LCH3ACK SPLY V UNLATCH	GS AK7315E	OFF					
544-01	K	CMD	ARMS	00A	LCH3ACK SPLY V UNLATCH	GS AK8090E	ON					
549-03	K	CMD	ARMS	00A	LCH3ACK SPLY V UNLATCH	GS AK8090E	ON					
831-00	A	CMD	GOX	A133680	EXTEND LOCK VALVE-CLOSE	GS AK8095E	ON					
857-00	B	CMD	GOX	A133680	EXTEND LOCK VALVE-CLOSE	GS AK8095E	ON					
831-01	A	CMD	GOX	A133680	EXTEND LOCK VALVE-CLOSE	GS AK8095E	ON					
857-01	B	CMD	GOX	A133680	EXTEND LOCK VALVE-CLOSE	GS AK8095E	ON					
313-00	CMD				LATCH BACK CMD	GS AK8140E	ON					
313-01	CMD				LATCH BACK CMD	GS AK8145E	ON					
831-04	A	CMD	GOX	A133501	PRI RETRACT VLV-RETRACT	GS AK8160E	ON					
835-00	A	CMD	GOX	A133501	PRI RETRACT VLV-RETRACT	GS AK8160E	OFF					
857-04	B	CMD	GOX	A133501	PRI RETRACT VLV-RETRACT	GS AK8160E	ON					
862-00	B	CMD	GOX	A133501	PRI RETRACT VLV-RETRACT	GS AK8160E	OFF					
886-02	V	CMD	GOX	A133501	PRI RETRACT VLV-RETRACT	GS AK8160E	ON					
890-00	V	CMD	GOX	A133501	PRI RETRACT VLV-RETRACT	GS AK8160E	OFF					
831-05	A	CMD	GOX	A133501	PRI RETRACT VLV-RETRACT	GS AK8165E	ON					
835-01	A	CMD	GOX	A133501	PRI RETRACT VLV-RETRACT	GS AK8165E	OFF					
857-05	B	CMD	GOX	A133501	PRI RETRACT VLV-RETRACT	GS AK8165E	ON					
862-01	B	CMD	GOX	A133501	PRI RETRACT VLV-RETRACT	GS AK8165E	OFF					
886-03	V	CMD	GOX	A133501	PRI RETRACT VLV-RETRACT	GS AK8165E	ON					
890-01	V	CMD	GOX	A133501	PRI RETRACT VLV-RETRACT	GS AK8165E	OFF					

SEQ	TIME	CD	CLOCK	S	I	FJNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
:	:	:	:	:	:	:	:	:	DESIGNATOR	OR LO	HIGH	UNIT	:	:
831-02	A	CMD	G0X	A133501	PRIMARY	RETRACT	VLV-RESE	GS AK8170E	OFF					
835-02	A	CMD	G0X	A133501	PRIMARY	RETRACT	VLV-RESE	GS AK8170E	ON					
836-00	A	CMD	G0X	A133501	PRIMARY	RETRACT	VLV-RESE	GS AK8170E	OFF					
857-02	B	CMD	G0X	A133501	PRI	RETRACT	VLV-RESE	GS AK8170E	OFF					
862-02	B	CMD	G0X	A133501	PRI	RETRACT	VLV-RESE	GS AK8170E	ON					
863-00	B	CMD	G0X	A133501	PRIMARY	RETRACT	VLV-RESE	GS AK8170E	OFF					
866-00	V	CMD	G0X	A133501	PRI	RETRACT	VLV-RESE	GS AK8170E	OFF					
890-02	V	CMD	G0X	A133501	PRI	RETRACT	VLV-RESE	GS AK8170E	ON					
891-00	V	CMD	G0X	A133501	PRI	RETRACT	VLV-RESE	GS AK8170E	OFF					
831-03	A	CMD	G0X	A133501	PRIMARY	RETRACT	VLV-RESE	GS AK8175E	OFF					
835-03	A	CMD	G0X	A133501	PRIMARY	RETRACT	VLV-RESE	GS AK8175E	ON					
836-01	A	CMD	G0X	A133501	PRIMARY	RETRACT	VLV-RESE	GS AK8175E	ON					
857-03	B	CMD	G0X	A133501	PRI	RETRACT	VLV-RESE	GS AK8175E	OFF					
862-03	B	CMD	G0X	A133501	PRI	RETRACT	VLV-RESE	GS AK8175E	OFF					
863-01	B	CMD	G0X	A133501	PRI	RETRACT	VLV-RESE	GS AK8175E	ON					
866-01	V	CMD	G0X	A133501	PRIMARY	RETRACT	VLV-RESE	GS AK8175E	OFF					
890-03	V	CMD	G0X	A133501	PRI	RETRACT	VLV-RESE	GS AK8175E	OFF					
891-01	V	CMD	G0X	A133501	PRI	RETRACT	VLV-RESE	GS AK8175E	ON					
836-02	A	CMD	G0X	A133507	SECONDARY	RETRACT	RETRACT	GS AK8180E	ON					
863-02	B	CMD	G0X	A133507	SECONDARY	RETRACT	RETRACT	GS AK8180E	ON					
891-02	V	CMD	G0X	A133507	SEC	RETRACT	RETRACT	GS AK8180E	ON					
836-03	A	CMD	G0X	A133507	SECONDARY	RETRACT	RETRACT	GS AK8185E	ON					
863-03	B	CMD	G0X	A133507	SECONDARY	RETRACT	RETRACT	GS AK8185E	ON					
891-03	V	CMD	G0X	A133507	SEC	RETRACT	RETRACT	GS AK8185E	ON					
827-03	A	CMD	G0X	A133573	SEC	HOOD	UP	VLV-OPEN	GS AK8280E	ON				
829-00	A	CMD	G0X	A133573	SEC	HOOD	UP	VLV-OPEN	GS AK8280E	OFF				
830-00	A	CMD	G0X	A133573	SEC	HOOD	UP	VLV-OPEN	GS AK8280E	OFF				
850-03	B	CMD	G0X	A133573	SEC	HOOD	UP	VLV-OPEN	GS AK8280E	ON				
855-00	B	CMD	G0X	A133573	SEC	HOOD	UP	VLV-OPEN	GS AK8280E	OFF				
856-00	B	CMD	G0X	A133573	SEC	HOOD	UP	VLV-OPEN	GS AK8280E	OFF				
878-03	V	CMD	G0X	A133573	SEC	HOOD	UP	VLV-OPEN	GS AK8280E	ON				
880-00	V	CMD	G0X	A133573	SEC	HOOD	UP	VLV-OPEN	GS AK8280E	OFF				
881-00	V	CMD	G0X	A133573	SEC	HOOD	UP	VLV-OPEN	GS AK8280E	OFF				
827-04	A	CMD	G0X	A133573	SEC	HOOD	UP	VLV-OPEN	GS AK8285E	ON				
829-01	A	CMD	G0X	A133573	SEC	HOOD	UP	VLV-OPEN	GS AK8285E	OFF				
830-01	A	CMD	G0X	A133573	SEC	HOOD	UP	VLV-OPEN	GS AK8285E	ON				
850-04	B	CMD	G0X	A133573	SEC	HOOD	UP	VLV-OPEN	GS AK8285E	ON				
855-01	B	CMD	G0X	A133573	SEC	HOOD	UP	VLV-OPEN	GS AK8285E	OFF				
856-01	B	CMD	G0X	A133573	SEC	HOOD	UP	VLV-OPEN	GS AK8285E	OFF				
878-04	V	CMD	G0X	A133573	SEC	HOOD	UP	VLV-OPEN	GS AK8285E	ON				
880-01	V	CMD	G0X	A133573	SEC	HOOD	UP	VLV-OPEN	GS AK8285E	OFF				

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	IS
:	CD	T	:	:	:	:	:	:	:	PAGE	:
:	CLOCK	E	:	:	:	DESIGNATOR	SINGL	:	:	:	:
:	:	:	:	:	:	OR	LO	HIGH	UNIT	:	:
:	:	:	:	:	:	:	:	:	:	:	F
:	:	:	:	:	:	:	:	:	:	:	D
881-0		V	CMD	GOX	A13573 SEC HOOD UP VLV-OPEN	GSAK685E	OFF				
822-01		A	CMD	GOX	A13524 PRI HOOD UP VLV-OPEN	GSAK631UE	ON				
825-00	S18	A	CMD	GOX	A13524 PRI HOOD UP VLV-OPEN	GSAK631UE	OFF				
826-00	S19	A	CMD	GOX	A13524 PRI HOOD UP VLV-OPEN	GSAK631UE	OFF				
827-03	S20	A	CMD	GOX	A13524 PRI HOOD UP VLV-OPEN	GSAK631UE	OFF				
845-01		B	CMD	GOX	A13524 PRI HOOD UP VALVE-OPEN	GSAK631UE	ON				
848-00	S118	B	CMD	GOX	A13524 PRI HOOD UP VLV-OPEN	GSAK631UE	OFF				
849-00	S119	B	CMD	GOX	A13524 PRI HOOD UP VLV-OPEN	GSAK631UE	OFF				
850-00	S120	B	CMD	GOX	A13524 PRI HOOD UP VLV-OPEN	GSAK631UE	OFF				
872-01		V	CMD	GOX	A13524 PRI HOOD UP VLV-OPEN	GSAK631UE	OFF				
876-00	S18	V	CMD	GOX	A13524 PRI HOOD UP VLV-OPEN	GSAK631UE	OFF				
877-00	S19	V	CMD	GOX	A13524 PRI HOOD UP VLV-OPEN	GSAK631UE	OFF				
878-00	S20	V	CMD	GOX	A13524 PRI HOOD UP VLV-OPEN	GSAK631UE	OFF				
822-02		A	CMD	GOX	A13524 PRI HOOD UP VLV-OPEN	GSAK6315E	ON				
825-01		A	CMD	GOX	A13524 PRI HOOD UP VLV-OPEN	GSAK6315E	OFF				
826-01		A	CMD	GOX	A13524 PRI HOOD UP VLV-OPEN	GSAK6315E	OFF				
827-01		A	CMD	GOX	A13524 PRI HOOD UP VLV-OPEN	GSAK6315E	OFF				
845-02		B	CMD	GOX	A13524 PRI HOOD UP VALVE-OPEN	GSAK6315E	OFF				
848-01		B	CMD	GOX	A13524 PRI HOOD UP VLV-OPEN	GSAK6315E	ON				
849-01		B	CMD	GOX	A13524 PRI HOOD VLV-OPEN	GSAK6315E	OFF				
850-01		B	CMD	GOX	A13524 PRI HOOD UP VLV-OPEN	GSAK6315E	OFF				
872-02		V	CMD	GOX	A13524 PRI HOOD UP VLV-OPEN	GSAK6315E	OFF				
876-01		V	CMD	GOX	A13524 PRI HOOD UP VLV-OPEN	GSAK6315E	OFF				
877-01		V	CMD	GOX	A13524 PRI HOOD UP VLV-OPEN	GSAK6315E	OFF				
878-01		V	CMD	GOX	A13524 PRI HOOD UP VLV-OPEN	GSAK6315E	OFF				
843-00	S109	V	CMD	GOX	A135900 PRI REG FLOW VLV-OPEN	GSAK9J2UE	ON				
870-00	S9	B	CMD	GOX	A135900 PRI REG FLOW VLV-OPEN	GSAK9J2UE	ON				
843-01		B	CMD	GOX	A135900 PRI REG FLOW VLV-OPEN	GSAK9J25E	ON				
870-01		V	CMD	GOX	A135900 PRI REG FLOW VLV-OPEN	GSAK9J3UE	ON				
843-02		V	CMD	GOX	A135903 SEC REG FLOW VLV-OPEN	GSAK9J3UE	ON				
870-02		B	CMD	GOX	A135903 SEC REG FLOW VLV-OPEN	GSAK9J35E	ON				
843-03		B	CMD	GOX	A135903 SEC REG FLOW VLV-OPEN	GSAK9J35E	ON				
870-03		V	CMD	GOX	A135903 SEC REG FLOW VLV-OPEN	GSAK9J35E	ON				
841-02		B	CMD	GOX	A135916 IN VLV SEC CTL-OPEN	GSAK9U4UE	ON				
868-02		V	CMD	GOX	A135916 IN VLV SEC CTL-OPEN	GSAK9U4UE	ON				
841-03		B	CMD	GOX	A135916 IN VLV SEC CTL-OPEN	GSAK9U45E	ON				
868-03		V	CMD	GOX	A135916 IN VLV SEC CTL-OPEN	GSAK9U45E	ON				
839-08		B	CMD	GOX	A135918 INLET VLV PRI CTL-OPEN	GSAK9U5UE	ON				
866-12		V	CMD	GOX	A135918 INLET VLV PRI CTL-OPEN	GSAK9U5UE	ON				
839-09		B	CMD	GOX	A135918 INLET VLV PRI CTL-OPEN	GSAK9U55E	ON				
866-13		V	CMD	GOX	A135918 INLET VLV PRI CTL-OPEN	GSAK9U55E	ON				

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SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
:	CD	T	:	:	:	DESIGNATOR	SINGL	:	:	PAGE	S
:	CLOCK	E	:	:	:	OR LO	HIGH	UNIT	:	:	F
:	:	:	:	:	:	:	:	:	:	:	D
841-00	S108	B	CMD	GOX	A135920 IN VLV CTL SEL-SEC SEL	GS AKY06UE	ON				
868-00	S7	V	CMD	GOX	A135920 IN VLV CNTL SEL-SEC SEL	GS AKY06UE	ON				
841-01		B	CMD	GOX	A135920 IN VLV CTL SEL-SEC SEL	GS AKY065E	ON				
868-01		V	CMD	GOX	A135920 IN VLV CTL SEL-SEC SEL	GS AKY065E	ON				
839-06		B	CMD	GOX	HTR CTL NO.1 AC-ON	GS AKY154E	OFF				
866-08		V	CMD	GOX	HTR CNTL NO.1 - AC ON	GS AKY15UE	OFF				
839-07		B	CMD	GOX	HTR CTL NO.1 AC ON	GS AKY155E	OFF				
866-09		V	CMD	GOX	HTR CNTL NO.1 - AC ON	GS AKY155E	OFF				
839-02		B	CMD	GOX	HTR CTL NO.1 LOAD CONNECT	GS AKY16UE	OFF				
866-10		V	CMD	GOX	HTR CNTL NO.1 - LOAD CONNECT	GS AKY16UE	OFF				
839-03		B	CMD	GOX	HTR CTL NO.1 LOAD CONNECT	GS AKY165E	OFF				
866-11		V	CMD	GOX	HTR CNTL NO.1 - LOAD CONNECT	GS AKY165E	OFF				
839-04		B	CMD	GOX	HTR CTL NO.2 AC ON	GS AKY20UE	OFF				
866-04		V	CMD	GOX	HTR CNTL NO.2 - AC ON	GS AKY20UE	OFF				
839-05		B	CMD	GOX	HTR CTL NO.2 AC ON	GS AKY205E	OFF				
866-05		V	CMD	GOX	HTR CNTL NO.2 - AC ON	GS AKY205E	OFF				
839-00		B	CMD	GOX	HTR CTL NO.2 LOAD CONNECT	GS AKY21UE	OFF				
866-06		V	CMD	GOX	HTR CNTL NO.2 - LOAD CONNECT	GS AKY21UE	OFF				
839-01		B	CMD	GOX	HTR CTL NO.2 LOAD CONNECT	GS AKY215E	OFF				
866-07		V	CMD	GOX	HTR CNTL NO.2 - LOAD CONNECT	GS AKY215E	OFF				
866-00		B	CMD	GOX	HTR CTL NO.3 - AC ON	GS AKY25UE	OFF				
865-01		V	CMD	GOX	HTR CNTL NO.3 - AC ON	GS AKY255E	OFF				
866-02		B	CMD	GOX	HTR CTL NO.3 - LOAD CONNECT	GS AKY36UE	OFF				
866-03		V	CMD	GOX	HTR CNTL NO.3 - LOAD CONNECT	GS AKY365E	OFF				
060-12		K	VFY	ARMS	2700 PSI GN2 PRESS XDUCER	GS AP7601A	2000	PSIA	1 OF 4		3.1-14
060-13		K	VFY	ARMS	2700 PSI GN2 PRESS XDUCER	GS AP7606A	2000	PSIA	INHB M009		3.1-14
060-14		K	VFY	ARMS	750 PSI GN2 PRESS XDUCER	GS AP7611A	250	NOHI	1 OF 2		3.1-14
060-15		K	VFY	ARMS	750 PSI GN2 PRESS XDUCER	GS AP7616A	250	NOHI	INHB M009		3.1-14
116-18		B	ACL	GOX	A151887-HTR CHAMBER TEMP	GS AT9141A					
116-19		B	ACL	GOX	A151887 HTR CHAMBER TEMP	GS AT9146A					
116-16		B	ACL	GOX	A138440 SW HOOD SEAL TEMP	GS AT9201A					
116-17		B	ACL	GOX	A138440 SW HOOD SEAL TEMP	GS AT9306A					
115-14		B	ACL	GOX	A138439 NE HOOD SEAL TEMP	GS AT9311A					
116-15		B	ACL	GOX	A138439 NE HOOD SEAL TEMP	GS AT9316A					
888-00		V	VFY	GOX	6308A109 ARM FULLY EXTENDED SW 1	GS AX6071E	OFF		1 OF 4		
888-01		V	VFY	GOX	6308A109 ARM FULLY EXTENDED SW 1	GS AX6076E	OFF		1 OF 4		
888-02		V	VFY	GOX	6308A120 ARM FULLY EXTENDED SW 2	GS AX6081E	OFF		1 OF 4		
888-03		V	VFY	GOX	6308A120 ARM FULLY EXTENDED SW 2	GS AX6086E	OFF		GTO S50		
884-00	S31	V	VFY	GOX	A EXTEND TOP UNLOCKED SW	GS AX6091E	ON		1 OF 4		
884-01		V	VFY	GOX	A EXTEND TOP UNLOCKED SW	GS AX6096E	ON		1 OF 4		
884-02		V	VFY	GOX	A EXTEND TOP LOCKED SW	GS AX6101E	OFF		1 OF 4		

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OMI S9005 - L

DATE 12-10-85

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	SINGL	OR	LO	HIGH	UNIT	VALUE	ELSE	DURATION	LCC	PAGE	S	
:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
884-03	V	VFY	GOX	A	EXTEND TOP LOCKED SW	GSAX01U6E	OFF					AND						
884-04	V	VFY	GOX	A	EXTEND BOTTOM UNLOCKED SW	GSAX0111E	ON					1 OF 4						
884-05	V	VFY	GOX	A	EXTEND BOTTOM UNLOCKED SW	GSAX0110E	ON					1 OF 4						
884-06	V	VFY	GOX	A	EXTEND BOTTOM LOCKED SW	GSAX0121E	OFF					1 OF 4						
884-07	V	VFY	GOX	A	EXTEND BOTTOM LOCKED SW	GSAX0120E	OFF					GTO S31						
903-00	K	VFY	ARMS	0AA	ACCUM CHARGE V SW-VALVE OPEN	GSAX7U81E	ON					1 OF 4						
906-00	K	VFY	ARMS	0AA	ACCUM CHARGE V SW-VALVE OPEN	GSAX7U81E	OFF					1 OF 4						
903-02	K	VFY	ARMS	0AA	ACCUM CHARGE V SW-VALVE CLOSE	GSAX7U82E	OFF					1 OF 4						
906-02	K	VFY	ARMS	0AA	ACCUM CHARGE V SW-VALVE CLOSE	GSAX7U82E	ON					1 OF 4						
903-01	K	VFY	ARMS	0AA	ACCUM CHARGE V SW-VALVE OPEN	GSAX7U86E	ON					1 OF 4						
906-01	K	VFY	ARMS	0AA	ACCUM CHARGE V SW-VALVE OPEN	GSAX7U86E	OFF					1 OF 4						
903-03	K	VFY	ARMS	0AA	ACCUM CHARGE V SW-VALVE CLOSE	GSAX7U87E	OFF					GTO ST20						
906-03	K	VFY	ARMS	0AA	ACCUM CHARGE V SW-VALVE CLOSE	GSAX7U87E	ON					GTO ST40						
907-02	K	VFY	ARMS	0AA	GN2 INHIBIT V SW-VALVE OPEN	GSAX71U1E	ON					1 OF 4						
907-04	K	VFY	ARMS	0AA	GN2 INHIBIT V SW-VALVE CLOSE	GSAX71U2E	OFF					1 OF 4						
907-03	K	VFY	ARMS	0AA	GN2 INHIBIT V SW-VALVE OPEN	GSAX71U6E	ON					1 OF 4						
907-05	K	VFY	ARMS	0AA	GN2 INHIBIT V SW-VALVE CLOSE	GSAX71U7E	OFF					GTO ST50						
132-00	K	VFY	ARMS	A	HINGESIDE LATCHED SW	GSAX7111E	OFF					1 OF 4						
132-02	K	VFY	ARMS	A	HINGESIDE UNLATCHED SW	GSAX7112E	ON					1 OF 4						
132-04	K	VFY	ARMS	A	OUTSIDE LATCHED SW	GSAX7115E	OFF					1 OF 4						
132-06	K	VFY	ARMS	A	OUTSIDE UNLATCHED SW	GSAX7114E	ON					1 OF 4						
132-01	K	VFY	ARMS	A	HINGESIDE LATCHED SW	GSAX7110E	OFF					1 OF 4						
132-03	K	VFY	ARMS	A	HINGESIDE UNLATCHED SW	GSAX7117E	ON					GTO ST200						
132-05	K	VFY	ARMS	A	OUTSIDE LATCHED SW	GSAX7118E	OFF					1 OF 4						
132-07	K	VFY	ARMS	A	OUTSIDE UNLATCHED SW	GSAX7119E	ON					GTO ST200						
898-00	K	VFY	ARMS	0AA	PRI RETR SUPPLY VLV RESET IND	GSAX72U1E	ON					1 OF 4						
898-01	K	VFY	ARMS	0AA	PRI RETR SUPPLY VLV RESET IND	GSAX72U6E	ON					1 OF 4						
897-00	K	VFY	ARMS	0AA	PRI RETR SUPPLY VLV RETR IND	GSAX7211E	OFF					1 OF 4						
897-01	K	VFY	ARMS	0AA	PRI RETR SUPPLY VLV RETR IND	GSAX7216E	OFF					1 OF 4						
898-04	K	VFY	ARMS	0AA	PRI RETR RETURN VLV RESET IND	GSAX7221E	ON					1 OF 4						
898-05	K	VFY	ARMS	0AA	PRI RETR RETURN VLV RESET IND	GSAX7226E	ON					1 OF 4						
897-04	K	VFY	ARMS	0AA	PRI RETR RETURN VLV RETR IND	GSAX7231E	OFF					1 OF 4						
897-05	K	VFY	ARMS	0AA	PRI RETR RETURN VLV RETR IND	GSAX7236E	OFF					1 OF 4						
898-02	K	VFY	ARMS	0AA	SEC RETR SUPPLY VLV RESET IND	GSAX7241E	ON					1 OF 4						
897-03	K	VFY	ARMS	0AA	SEC RETR SUPPLY VLV RESET IND	GSAX7246E	ON					OR						
897-02	K	VFY	ARMS	0AA	SEC RETR SUPPLY VLV RETR IND	GSAX7251E	OFF					OR						
897-03	K	VFY	ARMS	0AA	SEC RETR SUPPLY VLV RETR IND	GSAX7256E	OFF					1 OF 4						
898-06	K	VFY	ARMS	0AA	SEC RETR RETURN VLV RESET IND	GSAX7261E	ON					1 OF 4						
898-07	K	VFY	ARMS	0AA	SEC RETR RETURN VLV RESET IND	GSAX7266E	ON					DISPLAY						
897-06	K	VFY	ARMS	0AA	SEC RETR RETURN VLV RETR IND	GSAX7271E	OFF					1 OF 4						
897-07	K	VFY	ARMS	0AA	SEC RETR RETURN VLV RETR IND	GSAX7276E	OFF					DISPLAY						

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OMI S9005 - L

DATE 12-10-85

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
:	CD	T	:	:	:	DESIGNATOR	:	:	:	:	:
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131-02	K	VFY	ARMS	A	EXTEND TOP LOCKED SW	GSAX7541E	OFF	1 OF 4			3.1-13
131-03	K	VFY	ARMS	A	EXTEND TOP LOCKED SW	GSAX7546E	OFF	GTO ST200			3.1-13
131-00	K	VFY	ARMS	A	EXTEND TOP UNLOCKED SW	GSAX7551E	ON	1 OF 4			3.1-13
131-01	K	VFY	ARMS	A	EXTEND TOP UNLOCKED SW	GSAX7556E	ON	1 OF 4			3.1-13
131-06	K	VFY	ARMS	A	EXTEND BOTTOM LOCKED SW	GSAX7561E	OFF	1 OF 4			3.1-12
131-07	K	VFY	ARMS	A	EXTEND BOTTOM LOCKED SW	GSAX7566E	OFF	GTO ST200			3.1-12
131-04	K	VFY	ARMS	A	EXTEND BOTTOM UNLOCKED SW	GSAX7571E	ON	1 OF 4			3.1-12
131-05	K	VFY	ARMS	A	EXTEND BOTTOM UNLOCKED SW	GSAX7576E	ON	1 OF 4			3.1-12
624-01	K	VFY	ARMS	PRI	FULLY EXTENDED SW	GSAX7581E	ON	1 OF 4			3.1-12
624-02	K	VFY	ARMS	PRI	FULLY EXTENDED SW	GSAX7586E	ON	1 OF 4			3.1-12
624-03	K	VFY	ARMS	SEC	FULLY EXTENDED SW	GSAX7601E	ON	1 OF 4			3.1-12
624-04	K	VFY	ARMS	SEC	FULLY EXTENDED SW	GSAX7606E	ON	1 OF 4			3.1-12
136-02	K	CVFY	ARMS	A	FULLY RETRACTED SWITCH-RET	GSAX7621E	OFF	GTO ST470			3.1-16
145-01	K	VFY	ARMS	A	FULLY RETRACTED SWITCH - RET	GSAX7621E	ON	1 OF 4			3.1-16
901-00	K	CVFY	ARMS	A	FULLY RETRACTED SWITCH - RET	GSAX7621E	ON	1 OF 4			3.1-16
136-01	K	CVFY	ARMS	A	FULLY RETRACTED SWITCH-RET	GSAX7626E	OFF	1 OF 4			3.1-16
145-03	K	VFY	ARMS	A	FULLY RETRACTED SWITCH - RET	GSAX7626E	ON	1 OF 4			3.1-16
901-01	K	CVFY	ARMS	A	FULLY RETRACTED SWITCH - RET	GSAX7626E	ON	1 OF 4			3.1-16
136-04	K	CVFY	ARMS	A	FULLY RETRACTED SWITCH - RET	GSAX7631E	ON	1 OF 4			3.1-16
136-03	K	CVFY	ARMS	A	FULLY RETRACTED SW-NOT SW	GSAX7636E	ON	1 OF 4			3.1-16
060-00	K	VFY	ARMS	ACCUM	LEVEL SW NO. 1 LOW	GSAX7641E	OFF	2 OF 4			3.1-16
050-04	K	VFY	ARMS	ACCUM	LEVEL SW NO. 1 LOW	GSAX7646E	OFF	2 OF 4			3.1-16
631-00	K	VFY	ARMS	OAA	ACCUM LEVEL SW NO.1 NORMAL	GSAX7651E	ON	4 OF 4			3.1-16
904-00	K	VFY	ARMS	OAA	ACCUM LEVEL SW NO. 1 NORMAL	GSAX7651E	ON	4 OF 4			3.1-16
631-04	K	VFY	ARMS	OAA	ACCUM LEVEL SW NO.1 NORMAL	GSAX7656E	ON	4 OF 4			3.1-16
904-04	K	VFY	ARMS	OAA	ACCUM LEVEL SW NO. 1 NORMAL	GSAX7656E	ON	4 OF 4			3.1-16
050-01	K	VFY	ARMS	ACCUM	LEVEL SW NO. 2 LOW	GSAX7661E	OFF	2 OF 4			3.1-16
060-05	K	VFY	ARMS	ACCUM	LEVEL SW NO. 2 LOW	GSAX7666E	OFF	2 OF 4			3.1-16
631-01	K	VFY	ARMS	OAA	ACCUM LEVEL SW NO.2 NORMAL	GSAX7671E	ON	4 OF 4			3.1-16
904-01	K	VFY	ARMS	OAA	ACCUM LEVEL SW NO. 2 NORMAL	GSAX7671E	ON	4 OF 4			3.1-16
631-05	K	VFY	ARMS	OAA	ACCUM LEVEL SW NO.2 NORMAL	GSAX7676E	ON	4 OF 4			3.1-16
904-05	K	VFY	ARMS	OAA	ACCUM LEVEL SW NO. 2 NORMAL	GSAX7676E	ON	4 OF 4			3.1-16
060-02	K	VFY	ARMS	ACCUM	LEVEL SW NO. 3 LOW	GSAX7681E	OFF	2 OF 4			3.1-16
060-06	K	VFY	ARMS	ACCUM	LEVEL SW NO. 3 LOW	GSAX7686E	OFF	2 OF 4			3.1-16
631-02	K	VFY	ARMS	OAA	ACCUM LEVEL SW NO.3 NORMAL	GSAX7691E	ON	4 OF 4			3.1-16
904-02	K	VFY	ARMS	OAA	ACCUM LEVEL SW NO. 3 NORMAL	GSAX7691E	ON	4 OF 4			3.1-16
631-06	K	VFY	ARMS	OAA	ACCUM LEVEL SW NO.3 NORMAL	GSAX7696E	ON	4 OF 4			3.1-16
904-06	K	VFY	ARMS	OAA	ACCUM LEVEL SW NO. 3 NORMAL	GSAX7696E	ON	4 OF 4			3.1-16
060-03	K	VFY	ARMS	ACCUM	LEVEL SW NO. 4 LOW	GSAX7701E	OFF	OR			3.1-16
060-07	K	VFY	ARMS	ACCUM	LEVEL SW NO. 4 LOW	GSAX7706E	OFF	INHB M009			3.1-16
631-03	K	VFY	ARMS	OAA	ACCUM LEVEL SW NO.4 NORMAL	GSAX7711E	ON	OR			3.1-16

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DATE	TIME	SEQ	I	FUNC	DISC	NOMENCLATURE	VALUE	OR	ELSE	DURATION	LCC	PAGE	S
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9J4-03		K	VFY	ARMS	000	AAA ACCUM LEVEL SW NO. 4 NORMAL		GSAX7711E	ON	OR			
631-07		K	VFY	ARMS	000	AAA ACCUM LEVEL SW NO. 4 NORMAL		GSAX7716E	ON	GTO ST480			
904-07		K	VFY	ARMS	000	AAA ACCUM LEVEL SW NO. 4 NORMAL		GSAX7716E	ON	GTO ST30			
060-10		K	VFY	ARMS	000	2700 PSI GN2 PRESS SW NORM		GSAX7731E	ON	1 OF 4			
060-11		K	VFY	ARMS	000	2700 PSI GN2 PRESS SW NORM		GSAX7731E	ON	1 OF 4			3.1-14
832-00		A	VFY	G0X	000	A133508 PRI RETRACT VLV RETRACT		GSAX7736E	ON	1 OF 4			3.1-14
858-00		B	VFY	G0X	000	A133508 PRI RETRACT VLV RETRACT		GSAX8162E	ON	2 OF 2			
887-00		V	VFY	G0X	000	A133508 PRI RETRACT VLV RETRACT		GSAX8162E	ON	2 OF 2			
832-01		A	VFY	G0X	000	A133509 PRI RETRACT VLV RETRACT		GSAX8163E	ON	1 OF 2			
858-01		B	VFY	G0X	000	A133509 PRI RETRACT VLV RETRACT		GSAX8163E	ON	GTO S50			
887-02		V	VFY	G0X	000	A133509 PRI RETRACT VLV RETRACT		GSAX8163E	ON	GTO S150			
887-01		V	VFY	G0X	000	A133508 PRI RETRACT VLV RETRACT		GSAX8167E	ON	1 OF 2			
887-03		V	VFY	G0X	000	A133509 PRI RETRACT VLV RETRACT		GSAX8167E	ON	AND			
245-00		K	VFY	G0X	000	6308A103 RETRACT SWITCH NO.1		GSAX8168E	ON	GTO S50			
245-50		V	VFY	G0X	000	6308A103 RETRACT SWITCH NO. 1		GSAX8221E	ON	1 OF 3			3.1-17
834-00		A	VFY	G0X	000	6308A103 RETRACT SWITCH NO.1		GSAX8221E	ON	1 OF 6			
837-00		A	VFY	G0X	000	6308A103 RETRACT SWITCH NO.1		GSAX8221E	ON	1 OF 3			
860-00		B	VFY	G0X	000	6308A103 RETRACT SWITCH NO.1		GSAX8221E	ON	1 OF 3			
864-00		B	VFY	G0X	000	6308A103 RETRACT SWITCH NO.1		GSAX8221E	ON	1 OF 3			
889-00		V	VFY	G0X	000	6308A103 RETRACT SWITCH NO.1		GSAX8221E	ON	1 OF 6			
892-00		V	VFY	G0X	000	6308A103 RETRACT SWITCH NO. 1		GSAX8221E	ON	1 OF 6			
245-01		K	VFY	G0X	000	6308A102 RETRACT SWITCH NO.2		GSAX8222E	ON	1 OF 3			
245-51		V	VFY	G0X	000	6308A102 RETRACT SWITCH NO. 2		GSAX8222E	ON	1 OF 3			3.1-17
834-01		A	VFY	G0X	000	6308A103 RETRACT SWITCH NO.1		GSAX8222E	ON	1 OF 6			
837-01		A	VFY	G0X	000	6308A103 RETRACT SWITCH NO.2		GSAX8222E	ON	1 OF 3			
860-01		B	VFY	G0X	000	6308A103 RETRACT SWITCH NO.2		GSAX8222E	ON	1 OF 3			
864-01		B	VFY	G0X	000	6308A103 RETRACT SWITCH NO.1		GSAX8222E	ON	1 OF 3			
889-01		V	VFY	G0X	000	6308A102 RETRACT SWITCH NO.2		GSAX8222E	ON	1 OF 3			
892-01		V	VFY	G0X	000	6308A102 RETRACT SWITCH NO. 2		GSAX8222E	ON	1 OF 6			
245-53		V	VFY	G0X	000	6308A103 RETRACT SWITCH NO. 1		GSAX8226E	ON	1 OF 6			
889-03		V	VFY	G0X	000	6308A103 RETRACT SWITCH NO. 1		GSAX8226E	ON	1 OF 6			
892-03		V	VFY	G0X	000	6308A103 RETRACT SWITCH NO. 1		GSAX8226E	ON	1 OF 6			
245-54		V	VFY	G0X	000	6308A102 RETRACT SWITCH NO. 2		GSAX8227E	ON	1 OF 6			
889-04		V	VFY	G0X	000	6308A102 RETRACT SWITCH NO. 2		GSAX8227E	ON	1 OF 6			
892-04		V	VFY	G0X	000	6308A102 RETRACT SWITCH NO. 2		GSAX8227E	ON	1 OF 6			
833-00		A	VFY	G0X	000	6308A109 ARM FULLY EXTENDED		GSAX8227E	ON	1 OF 6			
859-00		B	VFY	G0X	000	6308A109 ARM FULLY EXTENDED		GSAX8231E	OFF	GTO S50			
824-00	S15	A	VFY	G0X	000	6308A200 HOOD UP SWITCH NO.1		GSAX8231E	OFF	GTO S150			
847-00	S115	B	VFY	G0X	000	6308A200 HOOD UP SWITCH NO.1		GSAX8231E	ON	2 OF 3			
874-00	S15	V	VFY	G0X	000	6308A200 HOOD UP SWITCH NO. 1		GSAX8231E	ON	2 OF 4			
879-00	S25	V	VFY	G0X	000	6308A200 HOOD UP SWITCH NO. 1		GSAX8231E	ON	3 OF 4			
								GSAX8231E	ON	3 OF 4			

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SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
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847-01	B	VFY	GOX		6308A201 HOOD UP SWITCH NO.2	GSAX8522E	ON		2 OF 4		
874-01	V	VFY	GOX		6308A201 HOOD UP SW NO. 2	GSAX8522E	ON		3 OF 4		
879-01	V	VFY	GOX		6308A201 HOOD UP SW NO. 2	GSAX8522E	ON		3 OF 4		
824-02	A	VFY	GOX		6308A201 HOOD UP SWITCH NO.3	GSAX8523E	ON		GTO S15		
847-03	B	VFY	GOX		6308A205 HOOD UP SWITCH NO.3	GSAX8523E	ON		GTO S115		
874-02	V	VFY	GOX		6308A205 HOOD UP SW NO. 3	GSAX8523E	ON		3 OF 4		
879-02	V	VFY	GOX		6308A205 HOOD UP SW NO. 3	GSAX8523E	ON		3 OF 4		
854-00	B	VFY	GOX	S125	6308A200 HOOD UP SWITCH NO.1	GSAX8526E	ON		2 OF 4		
875-00	V	VFY	GOX	S16	6308A200 HOOD UP SW NO. 1	GSAX8526E	ON		3 OF 4		
879-04	V	VFY	GOX	S26	6308A200 HOOD UP SW NO. 1	GSAX8526E	ON		3 OF 4		
828-00	A	VFY	GOX	S25	6308A200 HOOD UP SWITCH NO.2	GSAX8527E	ON		2 OF 3		
854-01	B	VFY	GOX		6308A201 HOOD UP SWITCH NO.2	GSAX8527E	ON		2 OF 4		
875-01	V	VFY	GOX		6308A201 HOOD UP SW NO. 2	GSAX8527E	ON		3 OF 4		
879-05	V	VFY	GOX		6308A201 HOOD UP SW NO. 2	GSAX8527E	ON		3 OF 4		
854-03	B	VFY	GOX		6308A205 HOOD UP SWITCH NO.3	GSAX8528E	ON		GTO S125		
875-02	V	VFY	GOX		6308A205 HOOD UP SW NO. 3	GSAX8528E	ON		3 OF 4		
879-06	V	VFY	GOX		6308A205 HOOD UP SW NO. 3	GSAX8528E	ON		3 OF 4		
828-02	A	VFY	GOX		6308A201 HOOD UP SWITCH NO.4	GSAX8529E	ON		GTO S25		
823-00	A	VFY	GOX		6308A202 HOOD DOWN SWITCH NO.1	GSAX8531E	OFF		1 OF 3		
845-00	B	VFY	GOX		6308A202 HOOD DOWN SWITCH NO.1	GSAX8531E	OFF		1 OF 4		
873-00	V	VFY	GOX		6308A202 HOOD DN SW NO. 1	GSAX8531E	OFF		1 OF 8		
846-01	B	VFY	GOX		6308A203 HOOD DOWN SWITCH NO.2	GSAX8532E	OFF		1 OF 4		
873-01	V	VFY	GOX		6308A203 HOOD DN SW NO. 2	GSAX8532E	OFF		1 OF 8		
823-01	A	VFY	GOX		6308A203 HOOD DOWN SWITCH NO.3	GSAX8533E	OFF		1 OF 3		
846-02	B	VFY	GOX		6308A206 HOOD DOWN SWITCH NO.3	GSAX8533E	OFF		1 OF 4		
873-02	V	VFY	GOX		6308A206 HOOD DN SW NO. 3	GSAX8533E	OFF		1 OF 4		
873-04	V	VFY	GOX		6308A202 HOOD DN SW NO. 1	GSAX8536E	OFF		1 OF 8		
873-05	V	VFY	GOX		6308A203 HOOD DN SW NO. 2	GSAX8537E	OFF		1 OF 8		
873-06	V	VFY	GOX		6308A206 HOOD DN SW NO. 3	GSAX8538E	OFF		1 OF 8		
869-02	V	VFY	GOX		A135916 IN VLV SEC CNTL-OPEN	GSAX9041E	ON		1 OF 2		
842-01	B	VFY	GOX		A135916 IN VLV SEC CTL-OPEN	GSAX9046E	ON		GTO S109		
869-03	V	VFY	GOX		A135916 IN VLV SEC CNTL-OPEN	GSAX9046E	ON		GTO S9		
840-00	B	VFY	GOX		A135918 INLET VLV PRI CTL-OPEN	GSAX9051E	ON		GTO S108		
867-00	V	VFY	GOX		A135918 INLET VLV PRI CNTL-OPEN	GSAX9051E	ON		1 OF 2		
867-01	V	VFY	GOX		A135918 INLET VLV PRI CNTL-OPEN	GSAX9051E	ON		1 OF 2		
869-00	B	VFY	GOX		A135920 IN VLV CNTL SEL-SEC SEL	GSAX9061E	ON		GTO S7		
842-00	V	VFY	GOX		A135920 IN VLV CTL SEL	GSAX9061E	ON		1 OF 2		
869-01	V	VFY	GOX		A135920 IN VLV CNTL SEL-SEC SEL	GSAX9066E	ON		2 OF 2		
714-05	K	CMD	WATR		MLP ORBR HS V336-337 ARM CMD	GSAX9066E	ON		AND		
714-06	K	CMD	WATR		MLP ORBR HS V336-337 OP CMD	GWDKLU27E	ON				
714-07	K	CMD	WATR		MLP ORBR HS V336-337 CL CMD	GWDKLU28E	ON				
						GWDKLU29E	OFF				



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714-08	K	CMD	WATR	MLP	ORBR HS V336-337 CL CMD	GWDKLU71E	OFF				
226-00	K	CMD	WATR	PTCR	V0/LPS CMD BUS ON CMD	GWDKPI08E	ON				
320-04	K	CMD	WATR	PTCR	V0/LPS CMD BUS ON CMD	GWDKPI08E	ON				
320-08	K	CMD	WATR	PTCR	V0/LPS CMD BUS ON CMD	GWDKPI08E	OFF				
600-02	K	CMD	WATR	PTCR	V0/LPS CMD BUS ON CMD	GWDKPI08E	OFF				
714-01	K	CMD	WATR	PTCR	V0/LPS CMD BUS ON CMD	GWDKPI08E	ON				
320-10	K	CMD	WATR	PTCR	V0/LPS CMD BUS OFF	GWDKPI09E	ON				
320-14	K	CMD	WATR	PTCR	V0/LPS CMD BUS OFF	GWDKPI09E	OFF				
714-04	K	CMD	WATR	PTCR	V0/LPS CMD BUS OFF	GWDKPI09E	OFF				
226-01	K	CMD	WATR	PTCR	V0/LPS CMD BUS ON CMD	GWDKPI10E	ON				
320-05	K	CMD	WATR	PTCR	V0/LPS CMD BUS ON CMD	GWDKPI10E	ON				
320-09	K	CMD	WATR	PTCR	V0/LPS CMD BUS ON CMD	GWDKPI10E	OFF				
600-03	K	CMD	WATR	PTCR	V0/LPS CMD BUS ON CMD	GWDKPI10E	OFF				
714-02	K	CMD	WATR	PTCR	V0/LPS CMD BUS ON CMD	GWDKPI10E	ON				
600-07	K	CMD	WATR	SS	TURNAROUND CTR	GWDKPI12E	ON				
600-09	K	CMD	WATR	SS	TURNAROUND CTR	GWDKPI12E	OFF				
320-11	K	CMD	WATR	PTCR	V0/LPS CMD BUS OFF	GWDKPI13E	ON				
320-15	K	CMD	WATR	PTCR	V0/LPS CMD BUS OFF	GWDKPI13E	OFF				
714-03	K	CMD	WATR	PTCR	V0/LPS CMD BUS OFF	GWDKPI13E	OFF				
600-08	K	CMD	WATR	SS	TURNAROUND CTR	GWDKPI14E	ON				
600-10	K	CMD	WATR	SS	TURNAROUND CTR	GWDKPI14E	OFF				
260-01	K	CMD	WATR	SS	PRE L/O VLVS VENT CMD	GWDKPI22E	ON				
318-01	K	CMD	WATR	SS	PRE L/O VLVS VENT CMD	GWDKPI22E	OFF				
599-01	K	CMD	WATR	SS	PRE L/O VLVS VENT CMD	GWDKPI22E	OFF				
273-01	K	CMD	WATR	SS	POST L/O VLVS VENT CMD	GWDKPI24E	ON				
318-05	K	CMD	WATR	SS	POST L/O VLVS VENT CMD	GWDKPI24E	OFF				
600-01	K	CMD	WATR	SS	POST L/O VLVS VENT CMD	GWDKPI24E	OFF				
271-01	K	CMD	WATR	SS	PRE L/O VLVS OPEN CMD	GWDKPI30E	ON				
599-02	K	CMD	WATR	SS	PRE L/O VLVS OPEN CMD	GWDKPI30E	OFF				
318-02	K	CMD	WATR	SS	PRE L/O VLVS OPEN CMD	GWDKPI30E	OFF				
005-08	K	CVFY	WATR	SS	PRE L/O VLVS - OPEN CMD	GWDKPI30ER	OFF	LCC-1			
271-02	K	CMD	WATR	SS	PRE L/O VLVS OPEN CMD	GWDKPI32E	ON				
318-03	K	CMD	WATR	SS	PRE L/O VLVS OPEN CMD	GWDKPI32E	OFF				
599-03	K	CMD	WATR	SS	PRE L/O VLVS OPEN CMD	GWDKPI32E	OFF				
005-09	K	CVFY	WATR	SS	PRE L/O VLVS - OPEN CMD	GWDKPI32ER	OFF	LCC-1			
320-06	K	CMD	WATR	TS/V0	CONTROL TS-ON/V0-OFF	GWDKPI34E	ON				
320-12	K	CMD	WATR	TS/V0	CONTROL TS-ON/V0-OFF	GWDKPI34E	OFF				
320-07	K	CMD	WATR	TS/V0	CONTROL TS-ON/V0-OFF	GWDKPI35E	ON				
320-13	K	CMD	WATR	TS/V0	CONTROL TS-ON/V0-OFF	GWDKPI35E	OFF				
260-00	K	CMD	WATR	SS	PRE L/O VLVS VENT CMD	GWDKPI30E	ON				
318-00	K	CMD	WATR	SS	PRE L/O VLVS VENT CMD	GWDKPI30E	OFF				

SEQ	TIME	CD	ST	SE	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
TIME	CD	ST	SE	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE	
599-00	K	CMD	WATR	SS	PRE L/O VLV	VENT CMD	GWDKPT36E	OFF				
273-00	K	CMD	WATR	SS	POST L/O VLV	VENT CMD	GWDKPT38E	ON				
318-04	K	CMD	WATR	SS	POST L/O VLV	VENT CMD	GWDKPT38E	OFF				
500-00	K	CMD	WATR	SS	POST L/O VLV	VENT CMD	GWDKPT38E	OFF				
005-00	K	CVFY	WATR	SS	PNEUMATIC PRESSURE	PT1 STATUS	GWDKPT01A	1200	PSIG	1 OF 2	3.1-18	
005-01	K	CVFY	WATR	SS	PNEUMATIC PRESSURE	PT2 STATUS	GWDKPT02A	1200	PSIG	LCC-3	3.1-18	
005-14	K	CVFY	WATR	SS	TANK WATER LEVEL		GWDKPT83A	258.2	NOHI	1 OF 2	3.1-19	
005-15	K	CVFY	WATR	SS	TANK WATER LEVEL		GWDKPT84A	258.2	NOHI	LCC-1	3.1-19	
232-01	K	VFY	WATR	SS	V0 LCC BUS ARM	IND	GWDKPT09E	ON	INH3 MSEQ			
232-00	K	VFY	WATR	SS	V0 LCC BUS ARM	IND	GWDKPT12E	ON	1 OF 2			
051-01	K	VFY	WATR	VO/LPS	ENABLED	IND	GWDKPT13E	ON	INH3 MSEQ			
005-16	K	CVFY	WATR	SS	SOL PWR BUS	ON IND	GWDKPT29E	ON	INH3 MSEQ			
005-11	K	CVFY	WATR	SS	PRE/LO VLV	OP - CMD IND	GWDKPT35E	OFF	1 OF 2			
600-04	K	VFY	WATR	SS	PRE L/O VLV	VENT	GWDKPT37E	ON	LCC-1	3.1-21		
600-05	K	VFY	WATR	SS	PRE L/O VLV	VENT	GWDKPT38E	ON	1 OF 3			
600-06	K	VFY	WATR	SS	PRE L/O VLV	VENT	GWDKPT39E	ON	1 OF 3			
005-12	K	CVFY	WATR	SS	PRE L/O VLV	CLOSE CMD IND	GWDKPT42E	ON	GTO ST430			
005-13	K	CVFY	WATR	SS	POST L/O VLV	CLOSE CMD IND	GWDKPT43E	ON	LCC-1			
051-00	K	VFY	WATR	TS/CCS	OP CMD LOCKOUT	IND	GWDKPT47E	ON	LCC-1			
005-10	K	CVFY	WATR	SS	POST/LO VLV	OP - CMD IND	GWDKPT49E	OFF	INH3 MSEQ			
005-17	K	CVFY	WATR	SS	SOL PWR BUS	ON IND	GWDKPT55E	ON	LCC-1			
286-00	K	VFY	WATR	SS	POSTLFTF VENT	VLV SV8 OP IND	GWDKPT55E	ON	LCC-3	3.1-21		
286-01	K	VFY	WATR	SS	POSTLFTF VENT	VLV SV9 OP IND	GWDKPT56E	ON	2 OF 3	3.1-22		
286-02	K	VFY	WATR	SS	POSTLFTF VENT	VLV SV10 OP IND	GWDKPT57E	ON	2 OF 3	3.1-22		
005-05	K	CVFY	WATR	SS	POST L/O VLV	- LS V30 CL IND	GWDKPT65E	ON	EXIT			
005-06	K	CVFY	WATR	SS	POST L/O VLV	- LS V29 CL IND	GWDKPT67E	ON	LCC-1			
005-07	K	CVFY	WATR	SS	POST L/O VLV	- LS V28 CL IND	GWDKPT69E	ON	LCC-1			
285-00	K	CVFY	WATR	SS	PRE L/O VLV	- LS V27 OP IND	GWDKPT70E	ON	2 OF 3	3.1-23		
005-02	K	CVFY	WATR	SS	PRE L/O VLV	- LS V27 CL IND	GWDKPT71E	ON	LCC-1			
285-01	K	VFY	WATR	SS	PRE L/O VLV	- LS V26 OP IND	GWDKPT72E	ON	2 OF 3	3.1-23		
005-03	K	CVFY	WATR	SS	PRE L/O VLV	- LS V26 CL IND	GWDKPT73E	ON	LCC-1			
285-02	K	VFY	WATR	SS	PRE L/O VLV	- LS V25 OP IND	GWDKPT74E	ON	EXIT			
005-04	K	CVFY	WATR	SS	PRE L/O VLV	- LS V25 CL IND	GWDKPT75E	ON	LCC-1			
229-04	K	VFY	INTG	BIT	STATUS REGISTER		INTNAME	X0000	INH3 MSEQ			
229-09	K	VFY	INTG	BIT	STATUS REGISTER		INTNAME	X0000	INH3 MSEQ	2.3-10		
234-04	K	VFY	INTG	BIT	STATUS REGISTER		INTNAME	X0000	INH3 MSEQ	2.3-10		
234-09	K	VFY	INTG	BIT	STATUS REGISTER		INTNAME	X0000	INH3 MSEQ	2.3-10		
701-53	K	VFY	INTG	COMPUTE	NAME1 OR NAME2		INTNAME	XFFFF	DISPLAY			
713-11	K	VFY	INTG	GLS-NO	LCC-1 FAILURES		LCC-1	ON	GTO ST10			
713-12	K	VFY	INTG	GLS-NO	LCC-2 FAILURES		LCC-2	ON	GTO ST10			
713-13	K	VFY	INTG	GLS-NO	LCC-3 FAILURES		LCC-3	ON	GTO ST10			

DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S9005 - L :

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	S
:	CD	T	:	:	:	DESIGNATOR	SINGL	:	:	:
:	CLOCK	E	:	:	:	:	OR LO	HIGH	UNIT	:
:	:	:	:	:	:	:	:	:	:	:
713-14					GLS-NO LCC-4 FAILURES	LCC-4	ON		GT0 ST10	
229-00					EX DO BITE TEST 4 VIA PROM SEQ	LL1	OFF		INHB MSEQ	2.4-9
229-01					DO 0 CHAN 0	LL1	OFF		INHB MSEQ	2.7-8
229-02					DO 4 CHAN 0	LL1				
229-03					READ LL1 BITE STATUS REGISTER	LL1				
244-00					LOCK SR3 MDM LL1/LR1 CRITICAL	LL1/LR1	ON			
244-01					SRB MDM LOCKED	LL1/LR1	X0000		INHB MSEQ	2.3-12
234-00					EX DO BITE TEST 4 VIA PROM SEQ	LL2	OFF		INHB MSEQ	2.6-8
234-01					DO 0 CHAN 0	LL2	OFF		INHB MSEQ	2.6-8
234-02					DO 4 CHAN 0	LL2				
234-03					READ LL2 BITE STATUS REGISTER	LL2				
280-00					LOCK SR3 MDM LL2/LR2 CRITICAL	LL2/LR2	ON		MARK/GO	
229-05					SRB MDMS LOCKED	LL2/LR2	X0000			
229-06					EX DO BITE TEST 4 VIA PROM SEQ	LK1	OFF		INHB MSEQ	2.4-9
229-07					DO 0 CHAN 0	LK1	OFF		INHB MSEQ	2.7-8
229-08					DO 4 CHAN 0	LK1				
234-05					READ LR1 BITE STATUS REGISTER	LK1				
234-06					EX DO BITE TEST 4 VIA PROM SEQ	LK2	OFF		INHB MSEQ	2.6-8
234-07					DO 0 CHAN 0	LK2	OFF		INHB MSEQ	2.6-8
234-08					DO 4 CHAN 0	LK2				
101-00					READ LR2 BITE STATUS REGISTER	LU09			HOLD	
101-12					T-9 MILESTONE	MU09	ON		INHB M009	
101-02					GO FOR T-9 GLS START	MAPU	ON			
147-00					GLS-GO FOR APU START	MAPU				
147-10					APU START MILESTONE	MAPU				
713-04					INTG GLS-GO FOR APU START	MAPU	ON		HOLD	
					INTG GLS-GO FOR APU START	ME1	ON		GT0 ST10	
					SWITCH ALT SOURCE RF	ME2				
					SWITCH ALT SOURCE RF	ME3				
656-01					SWITCH ALT SOURCE RF	MES				
656-03					SWITCH ALT SOURCE RF	MES				
656-02					READ MEC PREFLIGHT BITE	MEC 1				
656-04					MEC MASTER RESET	MEC 1				
101-07					READ MEC PREFLIGHT BITE	MEC 2				
147-05					MEC MASTER RESET	MEC 2				
164-04					GLS-GO FOR SSME IGNITION	MENG	ON		INHB M009	
252-01					GLS-GO FOR SSME IGNITION	MENG	ON		INHB MAPU	
287-00					GLS-GO FOR SSME IGNITION	MENG	ON		INHB MPS4	
288-04					GLS-GO FOR SSME IGNITION	MENG	ON		INHB MSEQ	
					GO FOR SSME START	MENG				
					GLS-GO FOR SSME IGNITION	MENG	ON		EXIT	

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

DATE 12-10-85

OMI S9005 - L

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
:	CD	:	:	:	:	DESIGNATOR	SINGL	:	:	PAGE	:
:	CLOCK	:	:	:	:	:	OR LO	HIGH	UNIT	:	:
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713-09		VFY	INTG		GLS-60 FOR SSME IGNITION	MENG	ON		GTO ST10		
		CMD	INTG		PERFORM MIP 1	MIP1	ON				
		CMD	INTG		PERFORM MIP 1	MIP1					
		CMD	INTG		PERFORM MIP 1	MIP1					
		CMD	INTG		PERFORM MIP 2	MIP2	ON				
		CMD	INTG		PERFORM MIP 2	MIP2					
		CMD	INTG		PERFORM MIP 2	MIP2					
101-05		VFY	INTG		GLS-60 FOR ET LH2 REPLN TERM	MLH2	ON		INHB M009		
147-03		VFY	INTG		GLS-60 FOR ET LH2 REPLN TERM	MLH2	ON		INHB MAPU		
164-02		VFY	INTG		GLS-60 FOR ET LH2 REPLN TERM	MLH2	ON		INHB MPS4		
217-03		LABL	INTG		ET LH2 PREPRESS MILESTONE	MLH2					
217-04		VFY	INTG		GLS-60 FOR LH2 REPLENISH TERMINA	MLH2	ON		HOLD		
713-07		VFY	INTG		GLS-60 FOR ET LH2 REPLN TERM	MLH2	ON		GTO ST10		
101-04		VFY	INTG		GLS-60 FOR ET L02 PRE-PRESSURIZI	MLUX	ON		INHB M009		
147-02		VFY	INTG		GLS-60 FOR ET L02 PRE-PRESSURIZI	MLUX	ON		INHB MAPU		
164-01		VFY	INTG		GLS-60 FOR ET L02 PRE-PRESSURIZI	MLUX	ON		INHB MPS4		
199-00		LABL	INTG		ET L0X PREPRESS MILESTONE	MLUX					
199-04		VFY	INTG		GLS-60 FOR ET L0X PRE-PRESSURIZI	MLUX	ON		HOLD		
713-06		VFY	INTG		GLS-60 ET L02 PRE-PRESSURIZATION	MLUX	ON		GTO ST10		
101-01		VFY	INTG		GLS-60 FOR OAA RETRACT	M0AA	ON		INHB M009		
125-00		LABL	INTG		OAA MILESTONE	M0AA					
125-04		VFY	INTG		INTG GLS-60 FOR OAA RETRACT	M0AA	ON		HOLD		
713-02		VFY	INTG		GLS-60 FOR T-9 GLS START	M009	ON		GTO ST10		
713-03		VFY	INTG		GLS-60 FOR OAA RETRACT	M009	ON		GTO ST10		
101-03		VFY	INTG		GLS-60 FOR PURGE SEQ. 4	MPS4	ON		INHB M009		
147-01		VFY	INTG		GLS-60 FOR PURGE SEQ. 4	MPS4	ON		INHB MAPU		
164-00		LABL	INTG		PURGE SEQ 4 MILESTONE	MPS4					
164-09		VFY	INTG		GLS-60 FOR PURGE SEQ 4	MPS4	ON		HOLD		
713-05		VFY	INTG		GLS-60 FOR PURGE SEQ.4	MPS4	ON		GTO ST10		
101-06		VFY	INTG		GLS-60 FOR AUTO SEQ START	MSEQ	ON		INHB M009		
147-04		VFY	INTG		GLS-60 FOR AUTO SEQ START	MSEQ	ON		INHB MAPU		
164-03		VFY	INTG		GLS-60 FOR AUTO SEQ START	MSEQ	ON		INHB MPS4		
252-00		LABL	INTG		LAST HOLD MILESTONE	MSEQ					
252-06		VFY	INTG		GLS-60 FOR AUTO SEQ START	MSEQ	ON		HOLD		
713-08		VFY	INTG		GLS-60 FOR AUTO SEQ START	MSEQ	ON		GTO ST10		
101-08		VFY	INTG		GLS-60 FOR SRB IGNITION	MSRB	ON		INHB M009		
147-06		VFY	INTG		GLS-60 FOR SRB IGNITION	MSRB	ON		INHB MAPU		
164-05		VFY	INTG		GLS-60 FOR SRB IGNITION	MSRB	ON		INHB MPS4		
252-02		VFY	INTG		GLS-60 FOR SRB IGNITION	MSRB	ON		INHB MSEQ		
288-03		VFY	INTG		GLS-60 FOR SRB IGNITION	MSRB	ON		EXIT		
713-11		VFY	INTG		GLS-60 FOR SRB IGNITION	MSRB	ON		GTO ST10		

SEQ	TIME	I	FJNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE	S
:	:	:	:	:	:	:	:	:	:	:	:	:
:	CD	T	:	:	:	DESIGNATOR	SINGL	:	:	:	:	:
:	CLOCK	E	:	:	:	:	OR	LO	HIGH	UNIT	:	:
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218-02	COM	LH2	GO FOR LH2 REPLENISH TERM			NU04INTGR	LH2					
199-13	COM	L02	GO FOR ET LOX PRE-PRESSURIZATION			NU05INTGR	L02					PL
713-16	CMD	L02	GO FOR TERMINATE LOX REPLENISH			NU07INTGR	ON					PL
501-00	CMD	INTG	GLS BREAKOUT			NU11INTGR	ON					
321-00	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	BHYD					
321-01	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	HYD					
321-02	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	APU					
321-03	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	HYFUEL					
321-04	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	HYOXID					
321-05	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	ARMS					
321-06	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	MECH					
321-07	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	L02					
321-08	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	LH2					
321-09	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	MPS					
321-10	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	SSME					
321-11	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	GOXARM					
321-12	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	BR5					
321-13	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	TRS					
321-14	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	ECLSS					
321-15	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	FCP					
321-16	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	PLBD					
321-17	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	CARGO					
321-18	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	ECS					
321-19	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	WATER					
321-20	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	NAVAID					
321-21	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	COMM					
321-22	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	CEOA					
321-23	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	INSTR					
321-24	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	EPDC					
321-25	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	PVD					
321-26	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	BPYRO					
321-27	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	BELEC					
321-28	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	TINST					
321-29	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	BINST					
321-30	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	GNC					
321-31	COM	INTG	SYSTEMS IN CONTROL			NU12INTGR	DPS					
501-01	CMD	INTG	SYSTEMS IN CONTROL			NU12INTGR	ON					
568-01	CMD	L02	GO FOR SAFING			NU13INTGR	ON					
568-02	CMD	LH2	GO FOR SAFING			NU13INTGR	ON					
634-00	CMD	INTG	GLS SAFING COMPLETE			NU15INTGR	ON					
311-00	COM	L02	STS LIFTOFF COMM INTERRUPT			NU14INTGR	L02					

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:  DATE 12-10-85      :                   GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33      :                   OMI S9005 - L      :
:  SEQ : I : FJNC:DISC :     :                   :                   :                   :                   :                   :                   :                   :
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NO	TIME	CD	SEQ	I	FJNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
:	:	:	:	:	:	:	:	:	:	:	:	:	:
311-01			COM	LH2			STS LIFTOFF COMM INTERRUPT	NU14INTGR	LH2				
			COM	INTG			START ONE-SHOT DATA TRANSFER	NU20INTGR	DPS				
			COM	INTG			START ONE-SHOT DATA TRANSFER	NU20INTGR	INTG				
			COM	INTG			START ONE-SHOT DATA TRANSFER	NU20INTGR	SW				
			COM	INTG			START ONE-SHOT DATA TRANSFER	NU20INTGR	BKUP				
			COM	INTG			START OPS TRANSITION	NU22INTGR	DPS				
			COM	INTG			START OPS TRANSITION	NU22INTGR	INTG				
			COM	INTG			START OPS TRANSITION	NU22INTGR	SW				
			COM	INTG			START OPS TRANSITION	NU22INTGR	BKUP				
			CMD	INTG			START GPC DUMP AND COMPARE	NU24INTGR	DPS				
			CMD	INTG			START GPC DUMP AND COMPARE	NU24INTGR	INTG				
			CMD	INTG			START GPC DUMP AND COMPARE	NU24INTGR	SW				
			CMD	INTG			START GPC DUMP AND COMPARE	NU24INTGR	BKUP				
035-00			CVFY	DPS			PASS FSM OR BFS GPC ERR	NU39INTGR	OFF				
712-34			CMD	DPS			PASS FSM OR BFS GPC ERR	NU39INTGR	ON				
712-36			CMD	DPS			PASS FSM OR BFS GPC ERR	NU39INTGR	ON				
712-38			CMD	DPS			PASS FSM OR BFS GPC ERR	NU39INTGR	ON				
220-00			VFY	LH2			LH2 REPL TERM IN PROGRESS	NU39INTGR	ON				
216-00			VFY	LH2			LH2 FLIGHT MASS	NU39INTGR	ON				
713-01			VFY	L02			LOX FLIGHT MASS	NU39INTGR	ON				
204-00			VFY	L02			ET LOX PRESSURIZATION IN PROGRESS	NU39INTGR	ON				
713-18			VFY	L02			LOX REPL TERMINATE IN PROGRESS	NU39INTGR	ON				
022-00			VFY	INTG			ONE-SHOT DATA ACKNOWLEDGE	NU39INTGR	ON				
023-02			VFY	INTG			ONE-SHOT DATA ACKNOWLEDGE	NU39INTGR	ON				
028-00			VFY	INTG			ONE-SHOT DATA ACKNOWLEDGE	NU39INTGR	ON				
026-00			CMD	INTG			OPS 101 TRANSITION ACKNOWLEDGE	NU39INTGR	ON				
			VFY	INTG			GPC DUMP COMP ACKNOWLEDGE	NU39INTGR	OFF				
			VFY	INTG			GPC DUMP COMP ACKNOWLEDGE	NU39INTGR	OFF				
296-03			CMD	ECLS			GPU1 SELECT	NU39INTGR	ON				
512-06			VFY	ECLS			GPU1 SELECT	NU39INTGR	ON				
717-01			K	VFY	CINTG		MANUAL HOLD	NU39INTGR	ON				
242-00			VFY	LH2			LH2 PREPRESS CYCLE FAIL	NU39INTGR	ON				
311-02			CMD	INTG			STS LIFTOFF FLAG	NU39INTGR	OFF				
712-01			VFY	INTG			DPS I/O FAILURE	NU39INTGR	ON				
							\$ GPC BITE (PASS) ERROR	NU39INTGR	1				
							\$ I/O ERROR CRT1 OR CRT3	NU39INTGR	2				
							\$ GPC ERROR (BFS)	NU39INTGR	500				
712-33			CMD	DPS			DPS I/O ERROR	NU39INTGR	1				
712-35			CMD	DPS			DPS I/O ERROR	NU39INTGR	2				
712-37			CMD	DPS			DPS I/O ERROR	NU39INTGR	500				
715-01			VFY	INTG			GLS MAINLINE CONSOLE	NU39INTGR	2				
717-02			K	VFY	CINTG		TC HOLD/RESUME	NU39INTGR	0				

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CPER 6012 TIL MENG 6.9.3-2
INHB MSEQ
INHB MLH2
INHB MPS4
INHB MSEQ
INHB MPS4
WAIT
WAIT
INHB M009
GTO ST310
GTO ST10
INHB MSEQ 5.1-5
DISPLAY 6.9.3-7
INHB MENG $
INHB MSEQ $
GTO ST11
GTO ST10

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SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
:	:	:	:	:	:	:	:	:	:	:	:
:	CD	T	:	:	:	DESIGNATOR	SINGL	:	:	:	:
:	CLOCK	E	:	:	:	OR	LO:HIGH	UNIT	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
706-01	VFY	LH2	REPLACE	LH2	ULLAGE PRESS N01 XDC	N41K17UUX	OFF	DISPLAY	GTO ST10		
706-05	CMD	LH2	REPLACE	LH2	ULLAGE PRESS N01 XDC	N41K17UUX	ON				
707-01	VFY	LH2	REPLACE	LH2	ULLAGE PRESS N01 XDC	N41K17UUX	OFF	DISPLAY	GTO ST10		
708-01	VFY	LH2	REPLACE	LH2	ULLAGE PRESS N01 XDC	N41K17UUX	OFF	DISPLAY	GTO ST10		
706-02	VFY	LH2	REPLACE	LH2	ULLAGE PRESS N02 XDC	N41K17U1X	OFF	DISPLAY	GTO ST10		
707-02	VFY	LH2	REPLACE	LH2	ULLAGE PRESS N02 XDC	N41K17U1X	OFF	DISPLAY	GTO ST10		
707-05	CMD	LH2	REPLACE	LH2	ULLAGE PRESS N02 XDC	N41K17U1X	ON				
708-02	VFY	LH2	REPLACE	LH2	ULLAGE PRESS N02 XDC	N41K17U1X	OFF	DISPLAY	GTO ST10		
706-03	VFY	LH2	REPLACE	LH2	ULLAGE PRESS N03 XDC	N41K17U2X	OFF	DISPLAY	GTO ST10		
707-03	VFY	LH2	REPLACE	LH2	ULLAGE PRESS N03 XDC	N41K17U2X	OFF	DISPLAY	GTO ST10		
708-03	VFY	LH2	REPLACE	LH2	ULLAGE PRESS N03 XDC	N41K17U2X	OFF	DISPLAY	GTO ST10		
708-05	CMD	LH2	REPLACE	LH2	ULLAGE PRESS N03 XDC	N41K17U2X	ON				
709-01	VFY	L02	REPLACE	L02	ULLAGE PRESS N01 XDC	N41K1750X	OFF	DISPLAY	GTO ST10		
709-05	CMD	L02	REPLACE	L02	ULLAGE PRESS N01 XDC	N41K1750X	ON				
710-01	VFY	L02	REPLACE	L02	ULLAGE PRESS N01 XDC	N41K1750X	OFF	DISPLAY	GTO ST10		
711-01	VFY	L02	REPLACE	L02	ULLAGE PRESS N01 XDC	N41K1750X	OFF	DISPLAY	GTO ST10		
709-02	VFY	L02	REPLACE	L02	ULLAGE PRESS N02 XDC	N41K1751X	OFF	DISPLAY	GTO ST10		
710-02	VFY	L02	REPLACE	L02	ULLAGE PRESS N02 XDC	N41K1751X	OFF	DISPLAY	GTO ST10		
710-05	CMD	L02	REPLACE	L02	ULLAGE PRESS N02 XDC	N41K1751X	ON				
711-02	VFY	L02	REPLACE	L02	ULLAGE PRESS N02 XDC	N41K1751X	OFF	DISPLAY	GTO ST10		
709-03	VFY	L02	REPLACE	L02	ULLAGE PRESS N03 XDC	N41K1752X	OFF	DISPLAY	GTO ST10		
710-C	VFY	L02	REPLACE	L02	ULLAGE PRESS N03 XDC	N41K1752X	OFF	DISPLAY	GTO ST10		
711-03	VFY	L02	REPLACE	L02	ULLAGE PRESS N03 XDC	N41K1752X	OFF	DISPLAY	GTO ST10		
711-05	CMD	L02	REPLACE	L02	ULLAGE PRESS N03 XDC	N41K1752X	ON				
583-04	K	CPVD	PREREQUISITE	CONTROL	LOGIC	NECK9911X	OFF				
594-00	K	CPVD	PREREQUISITE	CONTROL	LOGIC	NECK9911X	OFF				
029-00	VFY	INTG	CURRENT	LDB	GPC MEMORY CONFIG	NGPCLLMCNFG 1		GTO ST100			
550-00	VFY	INTG	CURRENT	LDB	GPC MEMORY CONFIG	NGPCLLMCNFG 9		GTO ST500			
567-11	V	CMD	PD3	CTL	OVERRIDE	NLHX115E	ON				
567-13	K	CMD	PV13	CTL	OVERRIDE	NLHX115E	ON				
567-09	K	CMD	PV13	CTL	OVERRIDE	NLHKUU38X	ON				
567-07	K	CMD	PD3	CTL	OVERRIDE	NLHKUU40X	ON				
567-10	K	CMD	GCH58	SHUTOFF		NLHKUU60X	ON				
567-14	V	CMD	GCH56V	SHUTOFF		NLHKUU60X	ON				
567-08	V	CMD	GCH60	SHUTOFF		NLHKUU62X	ON				
567-12	V	CMD	GCH58V	SHUTOFF		NLHKUU62X	ON				
822-00	A	VFY	HOOD	SECONDARY	MODE SELECTED	NLHKUU62X	ON				
827-02	A	CMD	HOOD	SECONDARY	MODE SELECTED	NLHKUU62X	ON	GTO S20			
845-00	B	VFY	HOOD	SECONDARY	MODE SELECTED	NLHKUU62X	ON	GTO S120			
850-02	B	CMD	HOOD	SECONDARY	MODE SELECTED	NLHKUU62X	ON				
872-00	V	VFY	HOOD	SECONDARY	MODE SELECTED	NLHKUU62X	OFF	GTO S20			

DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S9005 - L :

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
:	CD	:	:	:	:	DESIGNATOR	SINGL	:	:	PAGE	:
:	CLOCK	:	:	:	:	:	OR LO	HIGH	UNIT	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:

878-02	V	CMD	GOX	INTG	HOOD SECONDARY MODE SELECTED	NSAKUJ02X	ON				
170-03		CMD	INTG	FCL	SWITCH ALT SOURCE RF/HIGH RATE	OIA	ON				
170-01		CMD	FCL	FCL	INITIATE AERO-SURFACE DRIVE CHEC	PUU1	ON				
801-00		LABL	FCL	FCL	AERO-SURFACE PROFILE EVAL	PUU1	ON				
175-00		CMD	FCL	FCL	INITIATE MPS GIMBAL CHECK	PUU2	ON				
175-01		CMD	FCL	FCL	MPS GIMBAL PROFILE EVAL	PUU2	ON				
806-03		LABL	FCL	FCL		PUU2					
267-00		CMD	BHYD	BHYD	SRB FCS/HYD VERIF FLAG	PUU3	ON				
267-01		CMD	BHYD	BHYD	SRB GIMBAL PROFILE EVAL	PUU3	ON				
810-03		LABL	BHYD	BHYD		PUU3					
202-00		CMD	GOX	GOX	START 6002 VENT ARM RETRACT	PUU4	ON				
815-00		LABL	GOX	GOX		PUU4					
894-00		LABL	INTG	INTG		PUU5					
048-00		CMD	INTG	INTG	RF SWITCH	PCMS					
523-03		CMD	INTG	INTG	VENT DOOR SAFING ENABLED	SU13	ON				
568-00		LABL	INTG	INTG		SU13					
588-00		LABL	INTG	INTG		SU14					
031-00		VFY	INTG	INTG	BACKUP TYPE II CONSOLE GO MODE	SBKUP00	ON				
046-04		VFY	INTG	INTG	BACKUP TYPE II CONSOLE GO MODE	SBKUP00	ON				
715-03		VFY	INTG	INTG	BACKUP TYPE II CONSOLE GO MODE	SBKUP00	ON				
715-04		VFY	INTG	INTG	BACKUP TYPE II CONSOLE GO MODE	SBKUP00	ON				
715-05		VFY	INTG	INTG	BACKUP TYPE II CONSOLE GO MODE	SBKUP00	ON				
021-00		VFY	INTG	INTG	OPERATIONS CONSOLE #12 GO MODE	SC1260	ON				
030-00		VFY	INTG	INTG	OPERATIONS CONSOLE #12 GO MODE	SC1260	ON				
046-02		VFY	INTG	INTG	OPERATIONS CONSOLE #12 GO MODE	SC1260	ON				
046-00		VFY	INTG	INTG	OPERATIONS CONSOLE #12 GO MODE	SC1260	ON				
046-01		VFY	INTG	INTG	OPERATIONS CONSOLE #3 GO MODE	SC360	ON				
046-13		VFY	INTG	INTG	OPERATIONS CONSOLE #4 GO MODE	SC460	ON				
046-14		VFY	INTG	INTG	GPC FEP AREA 1 STATUS	SGPCAR1A1	ON				
046-07		VFY	INTG	INTG	GPC INVALID SWITCH SEQUENCE	SGPCISWSEQ	OFF				
046-08		VFY	INTG	INTG	GSE FEP #1 ACTIVE DATA VALID	SGSTADATAV	ON				
046-09		VFY	INTG	INTG	GSE FEP #2 ACTIVE DATA VALID	SGS2ADATAV	ON				
		VFY	INTG	INTG	GSE FEP #3 ACTIVE DATA VALID	SGS3ADATAV	ON				
ST010		VFY	INTG	INTG	INTEGRATION CONSOLE GO MODE	SINT000	ON				

2.1-15



GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI S9005 - L

DATE 12-10-85

SEQ	TIME	CD	CLOCK	IS	FJNC	DISC	NOMENCLATURE	FUNCTION	VALUE	OR LO	HIGH	UNIT	ELSE	DURATION	LCC	PAGE
024-00	-20:00				INTG		INTEGRATION CONSOLE GO MODE	SINTGGU	ON					HOLD AT T-9 MIN		
	ST060				INTG		INTEGRATION CONSOLE GO MODE	SINTGGU	ON					GTO ST070		
	ST110				INTG		INTEGRATION CONSOLE GO MODE	SINTGGU	ON					GTO ST120		
	ST150				INTG		INTEGRATION CONSOLE GO MODE	SINTGGU	ON					GTO ST160		
102-00					INTG		INTEGRATION CONSOLE GO MODE	SINTGGU	ON					EXIT		
046-06					INTG		LDB FEP ACTIVE DATA VALID	SLDBADATAV	ON					TIL MSRB		
	ST020				INTG		MASTER CONSOLE GO MODE	SMSTRGU	ON					INHB MENG	4-12	
	ST070				INTG		MASTER CONSOLE GO MODE	SMSTRGU	ON					GTO ST030		
	ST120				INTG		MASTER CONSOLE GO MODE	SMSTRGU	ON					GTO ST080		
	ST160				INTG		MASTER CONSOLE GO MODE	SMSTRGU	ON					GTO ST130		
046-03					INTG		MASTER CONSOLE GO MODE	SMSTRGU	ON					GTO ST170		
046-14					INTG		128 OI FEP ACTIVE DATA VALID	SOLADATAV	ON					INHB MSEQ	4-4	
046-05					INTG		PROCESSING DATA RECORDER GO MODE	SPDKGGU	ON					INHB MSRB	4-14	
046-10					INTG		TIME CODE GEN PBIC=1 DATA VALID	STCGGDATAV	ON					INHB MSEQ	4-17	
046-11					INTG		TIME CODE GEN PBIC=2 DATA VALID	STCGGDATAV	ON					1 OF 2	4-18	
192-00					FCL		ENG 1 PITCH SEC DELTA PRESS	SUM1	-350		350	PSID		INHB MSEQ	4-18	
184-00					FCL		R OUTBD ELEV SEC DELTA P	SJM1U	-350		350	PSID		INHB MSEQ	6.9.10-21	
185-00					FCL		L INBD ELEV SEC DELTA P	SJM11	-350		350	PSID		INHB MSEQ	6.9.10-13	
186-00					FCL		L OUTBD ELEV SEC DELTA P	SJM12	-350		350	PSID		INHB MSEQ	6.9.10-13	
193-00					FCL		ENG 1 YAW SEC DELTA PRESS	SJM2	-350		350	PSID		INHB MSEQ	6.9.10-21	
194-00					FCL		ENG 2 PITCH SEC DELTA PRESS	SJM3	-350		350	PSID		INHB MSEQ	6.9.10-21	
195-00					FCL		ENG 2 YAW SEC DELTA PRESS	SJM4	-350		350	PSID		INHB MSEQ	6.9.10-21	
196-00					FCL		ENG 3 PITCH SEC DELTA PRESS	SJM5	-350		350	PSID		INHB MSEQ	6.9.10-21	
197-00					FCL		ENG 3 YAW SEC DELTA PRESS	SJM6	-350		350	PSID		INHB MSEQ	6.9.10-21	
181-00					FCL		RUDDER DELTA PRESS	SJM7	-350		350	PSID		INHB MSEQ	6.9.10-8	
182-00					FCL		SPEEDBRAKE DELTA PRESS	SJM8	-350		350	PSID		INHB MSEQ	6.9.10-8	
183-00					FCL		R INBD ELEV SEC DELTA P	SJM9	-350		350	PSID		INHB MSEQ	6.9.10-13	
222-00					LH2		ET LH2 ULLAGE PRESS NO.1	T41P1/UUC1	40.9	44.1	44.1	PSIA		INHB MSEQ	6.9.10-13	
706-07					LH2		ET LH2 ULLAGE PRESS NO.1	T41P1/UUC1	40.9	44.1	44.1	PSIA		INHB MSEQ	5.1-7	
706-11					LH2		ET LH2 ULLAGE PRESS NO.1	T41P1/UUC1	40.9	44.1	44.1	PSIA		2 OF 3		
707-07					LH2		ET LH2 ULLAGE PRESS NO.1	T41P1/UUC1	40.9	44.1	44.1	PSIA		2 OF 3		
707-11					LH2		ET LH2 ULLAGE PRESS NO.1	T41P1/UUC1	40.9	44.1	44.1	PSIA		2 OF 3		
708-07					LH2		ET LH2 ULLAGE PRESS NO.1	T41P1/UUC1	40.9	44.1	44.1	PSIA		2 OF 3		
708-11					LH2		ET LH2 ULLAGE PRESS NO.1	T41P1/UUC1	40.9	44.1	44.1	PSIA		2 OF 3		
222-01					LH2		ET LH2 ULLAGE PRESS NO.2	T41P1/UUC1	40.9	44.1	44.1	PSIA		2 OF 3		
706-08					LH2		ET LH2 ULLAGE PRESS NO.2	T41P1/UUC1	40.9	44.1	44.1	PSIA		2 OF 3		
706-12					LH2		ET LH2 ULLAGE PRESS NO.2	T41P1/UUC1	40.9	44.1	44.1	PSIA		2 OF 3		
707-08					LH2		ET LH2 ULLAGE PRESS NO.2	T41P1/UUC1	40.9	44.1	44.1	PSIA		2 OF 3		
707-12					LH2		ET LH2 ULLAGE PRESS NO.2	T41P1/UUC1	40.9	44.1	44.1	PSIA		2 OF 3		
708-08					LH2		ET LH2 ULLAGE PRESS NO.2	T41P1/UUC1	40.9	44.1	44.1	PSIA		2 OF 3		
708-12					LH2		ET LH2 ULLAGE PRESS NO.2	T41P1/UUC1	40.9	44.1	44.1	PSIA		2 OF 3		





SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
:	CD	:	:	:	:	DESIGNATOR	SINGL	:	:	:	:
:	CLOCK	:	:	:	:	OR	LO:HIGH	:	:	:	:
:	:	:	:	:	:	:	UNIT	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
222-02	CVFY	LH2	ET	LH2	ULLAGE PRESS NO.3	T41P1702C1	40.9	PSIA	CPER G008	TIL MENG	5.1-7
706-09	CVFY	LH2	ET	LH2	ULLAGE PRESS NO.3	T41P1702C1	40.9	PSIA	INH3 MSEQ		
706-13	CVFY	LH2	ET	LH2	ULLAGE PRESS NO.3	T41P1702C1	40.9	PSIA	EXIT	TIL MENG	
707-09	CVFY	LH2	ET	LH2	ULLAGE PRESS NO.3	T41P1702C1	40.9	PSIA	INH3 MSEQ		
707-13	CVFY	LH2	ET	LH2	ULLAGE PRESS NO.3	T41P1702C1	40.9	PSIA	EXIT	TIL MENG	
708-09	CVFY	LH2	ET	LH2	ULLAGE PRESS NO.3	T41P1702C1	40.9	PSIA	INH3 MSEQ		
708-13	CVFY	LH2	ET	LH2	ULLAGE PRESS NO.3	T41P1702C1	40.9	PSIA	EXIT	TIL MENG	
214-00	CVFY	L02	ET	L02	ULLAGE PRESSURE NO.1	T41P1750C1	19.3	PSIG	CPER G009	TIL MENG	5.1-8
709-07	CVFY	L02	ET	L02	ULLAGE PRESSURE NO.1	T41P1750C1	19.3	PSIG	INH3 MSEQ		
709-11	CVFY	L02	ET	L02	ULLAGE PRESS NO.1	T41P1750C1	19.3	PSIG	2 OF 3		
710-07	CVFY	L02	ET	L02	ULLAGE PRESSURE NO.1	T41P1750C1	19.3	PSIG	INH3 MSEQ		
710-11	CVFY	L02	ET	L02	ULLAGE PRESS NO.1	T41P1750C1	19.3	PSIG	2 OF 3		
711-07	CVFY	L02	ET	L02	ULLAGE PRESSURE NO.1	T41P1750C1	19.3	PSIG	INH3 MSEQ		
711-11	CVFY	L02	ET	L02	ULLAGE PRESS NO.1	T41P1750C1	19.3	PSIG	2 OF 3		
214-01	CVFY	L02	ET	L02	ULLAGE PRESSURE NO.2	T41P1751C1	19.3	PSIG	CPER G010	TIL MENG	5.1-8
709-08	CVFY	L02	ET	L02	ULLAGE PRESSURE NO.2	T41P1751C1	19.3	PSIG	INH3 MSEQ		
709-12	CVFY	L02	ET	L02	ULLAGE PRESS NO.2	T41P1751C1	19.3	PSIG	2 OF 3		
710-08	CVFY	L02	ET	L02	ULLAGE PRESSURE NO.2	T41P1751C1	19.3	PSIG	INH3 MSEQ		
710-12	CVFY	L02	ET	L02	ULLAGE PRESS NO.2	T41P1751C1	19.3	PSIG	2 OF 3		
214-02	CVFY	L02	ET	L02	ULLAGE PRESSURE NO.3	T41P1752C1	19.3	PSIG	CPER G011	TIL MENG	5.1-8
709-09	CVFY	L02	ET	L02	ULLAGE PRESSURE NO.3	T41P1752C1	19.3	PSIG	INH3 MSEQ		
709-13	CVFY	L02	ET	L02	ULLAGE PRESS NO.3	T41P1752C1	19.3	PSIG	2 OF 3		
710-09	CVFY	L02	ET	L02	ULLAGE PRESSURE NO.3	T41P1752C1	19.3	PSIG	INH3 MSEQ		
710-13	CVFY	L02	ET	L02	ULLAGE PRESS NO.3	T41P1752C1	19.3	PSIG	2 OF 3		
711-09	CVFY	L02	ET	L02	ULLAGE PRESSURE NO.3	T41P1752C1	19.3	PSIG	INH3 MSEQ		
711-13	CVFY	L02	ET	L02	ULLAGE PRESS NO.3	T41P1752C1	19.3	PSIG	2 OF 3		
224-00	VFY	LH2	ET	LH2	LOW LEVEL LIQ SENSOR NO.1	T41X1730X1	WET		INH3 MSEQ		6.2-1-17
224-01	VFY	LH2	ET	LH2	LOW LEVEL LIQ SENSOR NO.2	T41X1731X1	WET		INH3 MSEQ		6.2-1-17
224-02	VFY	LH2	ET	LH2	LOW LEVEL LIQ SENSOR NO.3	T41X1732X1	WET		INH3 MSEQ		6.2-1-17
224-03	VFY	LH2	ET	LH2	LOW LEVEL LIQ SENSOR NO.4	T41X1733X1	WET		INH3 MSEQ		6.2-1-17
282-04	CMD	TRS	ET	TRS	INHIBIT/RESET CMD	T55K3001E	ON				
517-04	CMD	TRS	ET	TRS	INHIBIT/RESET CMD	T55K3001E	OFF				
148-02	CMD	TRS	ET	TRS	S/A DEVICE ARM CMD	T55K3110XL	ON				
151-02	CMD	TRS	ET	TRS	S/A DEVICE ARM CMD	T55K3110XL	OFF				
530-02	CMD	TRS	ET	TRS	S/A DEVICE ARM CMD	T55K3110XL	OFF				
530-03	CMD	TRS	ET	TRS	S/A DEVICE SAFE 1	T55K3111XL	ON				
538-00	CMD	TRS	ET	TRS	S/A DEVICE SAFE 1	T55K3111XL	OFF				
530-04	CMD	TRS	ET	TRS	S/A DEVICE SAFE 2	T55K3112XL	ON				
538-01	CMD	TRS	ET	TRS	S/A DEVICE SAFE 2	T55K3112XL	OFF				

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
CD	T					DESIGNATOR	SINGL			PAGE
CLOCK	E					OR	LO	HIGH	UNIT	
		S								
019-04			CVFY	TRS	ET RSS PIC CAP A VOLTAGE	T55V1730A1	N0L0	1-5	V	LCC-4
019-04			CVFY	TRS	ET RSS PIC CAP B VOLTAGE	T55V1731A1	N0L0	1-5	V	LCC-4
052-10			VFY	TRS	ET RSS BAT A V	T55V1735A1	26.7	32.3	V	INHB M009
052-11			VFY	TRS	ET RSS BAT B V	T55V1736A1	26.7	32.3	V	INHB M009
052-32			VFY	TRS	ET RSS S/A DVC SAFED	T55X1869X1	ON			INHB M009
153-05			VFY	TRS	ET RSS S/A DVC SAFED	T55X1869X1	OFF			INHB MPS4
613-00			VFY	TRS	ET RSS S/A DVC SAFED	T55X1869X1	ON			DISPLAY
052-29			VFY	TRS	ET RSS S/A DVC ARMED	T55X1870X1	OFF			INHB M009
153-02			VFY	TRS	ET RSS S/A DVC ARMED	T55X1870X1	ON			INHB MPS4
613-01			VFY	TRS	ET RSS S/A DVC ARMED	T55X1870X1	OFF			DISPLAY
602-00			VFY	TRS	ET RSS A INHIBIT/RESET IND	T55X1885X1	ON			DISPLAY
018-02			VFY	TRS	ET RSS DCDR PWR ON/CHK TONE OFF	T55X1925E1	ON		7 OF 7	
052-12			VFY	TRS	ET RSS DCDR PWR ON CHK TONE OFF	T55X1925E1	ON			INHB M009
052-17			VFY	TRS	ET RSS ARM CMD FROM DCDR IND	T55X1931E1	OFF			INHB M009
052-22			VFY	TRS	ET RSS FIRE CMD FROM DCDR IND	T55X1935E1	OFF			INHB M009
602-01			VFY	TRS	ET RSS B INHIBIT/RESET IND	T55X2888X1	ON			DISPLAY
056-00			VFY	TINS	TUMBLE SYSTEM ARMED	T56X0002E1	OFF			INHB M009
			CMD	INTG	SET 10 MIN HOLD TIMER	TIMER	10			MIN/SEC WAIT
			VFY	INTG	HOLD TIMER EXPIRED	TIMER				MIN
			CMD	INTG	SET 10 MIN HOLD TIMER	TIMER	10			MIN/SEC WAIT
			VFY	INTG	HOLD TIMER EXPIRED	TIMER				MIN
293-02			CMD	MPS	LH2 RECIRC VLVS OPEN CMD	V41K1111NL	OFF			
515-09			CMD	MPS	LH2 RECIRC VLVS OPEN CMD	V41K1111NL	OFF			
561-01			CMD	MPS	E-1 LH2 PREVLV OPEN CMD A	V41K1119XL	ON			
561-07			CMD	MPS	E-1 LH2 PREVLV OPEN CMD A	V41K1119XL	OFF			
561-02			CMD	MPS	E-1 LH2 PREVLV OPEN CMD B	V41K1120XL	ON			
561-08			CMD	MPS	E-1 LH2 PREVLV OPEN CMD B	V41K1120XL	OFF			
561-03			CMD	MPS	E-1 LH2 PREVLV OPEN CMD C	V41K1121XL	ON			
561-09			CMD	MPS	E-1 LH2 PREVLV OPEN CMD C	V41K1121XL	OFF			
561-04			CMD	MPS	E-1 LH2 PREVLV CLOSE CMD A	V41K1122XL	ON			
702-01			CMD	MPS	MPS E-1 LH2 PREVALVE CLOSE CMD A	V41K1122XL	OFF			
561-05			CMD	MPS	E-1 LH2 PREVLV CLOSE CMD B	V41K1123XL	ON			
702-02			CMD	MPS	MPS E-1 LH2 PREVALVE CLOSE CMD B	V41K1123XL	OFF			
561-06			CMD	MPS	E-1 LH2 PREVLV CLOSE CMD C	V41K1124XL	ON			
702-03			CMD	MPS	MPS E-1 LH2 PREVALVE CLOSE CMD C	V41K1124XL	OFF			
560-01			CMD	MPS	E-1 L02 PREVLV OPEN CMD A	V41K1136XL	ON			
560-09			CMD	MPS	E-1 L02 PREVLV OPEN CMD A	V41K1136XL	OFF			
560-02			CMD	MPS	E-1 L02 PREVLV OPEN CMD B	V41K1137XL	ON			
560-10			CMD	MPS	E-1 L02 PREVLV OPEN CMD B	V41K1137XL	OFF			
560-03			CMD	MPS	E-1 L02 PREVLV OPEN CMD C	V41K1138XL	ON			
560-11			CMD	MPS	E-1 L02 PREVLV OPEN CMD C	V41K1138XL	OFF			

DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S9005 - L :

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S		
:	:	CD	:	:	:	DESIGNATOR	SINGL	:	:	PAGE	:		
:	CLOCK	E	:	:	:	:	OR LO	HIGH	UNIT	:	F		
:	:	:	:	:	:	:	:	:	:	:	D		
560-05			CMD	MPS	E-1 L02	PREVLV	CLOSED	CMD A		V41K1139XL	ON		
560-06			CMD	MPS	E-1 L02	PREVLV	CLOSED	CMD B		V41K1140XL	ON		
560-07			CMD	MPS	E-1 L02	PREVLV	CLOSED	CMD C		V41K1141XL	ON		
560-08			CMD	MPS	E-1 L02	PREVLV	CLOSED	CMD D		V41K1142XL	ON		
560-04			CMD	MPS	E-1 L02	PREVLV	OPEN	CMD D		V41K1143XL	ON		
560-12			CMD	MPS	E-1 L02	PREVLV	OPEN	CMD D		V41K1143XL	OFF		
562-01			CMD	MPS	E-2 LH2	PREVLV	OPEN	CMD A		V41K1219XL	ON		
562-08			CMD	MPS	E-2 LH2	PREVLV	OPEN	CMD A		V41K1219XL	OFF		
562-03			CMD	MPS	E-2 LH2	PREVLV	OPEN	CMD B		V41K1220XL	ON		
562-09			CMD	MPS	E-2 LH2	PREVLV	OPEN	CMD B		V41K1220XL	OFF		
562-04			CMD	MPS	E-2 LH2	PREVLV	OPEN	CMD C		V41K1221XL	ON		
562-10			CMD	MPS	E-2 LH2	PREVLV	OPEN	CMD C		V41K1221XL	OFF		
562-05			CMD	MPS	E-2 LH2	PREVLV	CLOSE	CMD A		V41K1222XL	ON		
703-01			CMD	MPS	MPS E-2	LH2	PREVALVE	CLOSE	CMD A		V41K1222XL	OFF	
562-06			CMD	MPS	E-2 LH2	PREVLV	CLOSE	CMD B		V41K1223XL	ON		
703-02			CMD	MPS	MPS E-2	LH2	PREVALVE	CLOSE	CMD B		V41K1223XL	OFF	
562-07			CMD	MPS	E-2 LH2	PREVLV	CLOSE	CMD C		V41K1224XL	ON		
703-03			CMD	MPS	MPS E-2	LH2	PREVALVE	CLOSE	CMD C		V41K1224XL	OFF	
561-15			CMD	MPS	E-2 L02	PREVLV	OPEN	CMD A		V41K1236XL	ON		
561-23			CMD	MPS	E-2 L02	PREVLV	OPEN	CMD A		V41K1236XL	OFF		
561-16			CMD	MPS	E-2 L02	PREVLV	OPEN	CMD B		V41K1237XL	ON		
561-24			CMD	MPS	E-2 L02	PREVLV	OPEN	CMD B		V41K1237XL	OFF		
561-17			CMD	MPS	E-2 L02	PREVLV	OPEN	CMD C		V41K1238XL	ON		
561-25			CMD	MPS	E-2 L02	PREVLV	OPEN	CMD C		V41K1238XL	OFF		
561-19			CMD	MPS	E-2 L02	PREVLV	CLOSE	CMD A		V41K1239XL	ON		
561-20			CMD	MPS	E-2 L02	PREVLV	CLOSE	CMD B		V41K1240XL	ON		
561-21			CMD	MPS	E-2 L02	PREVLV	CLOSE	CMD C		V41K1241XL	ON		
561-22			CMD	MPS	E-2 L02	PREVLV	CLOSE	CMD D		V41K1242XL	ON		
561-18			CMD	MPS	E-2 L02	PREVLV	OPEN	CMD D		V41K1243XL	ON		
561-26			CMD	MPS	E-2 L02	PREVLV	OPEN	CMD D		V41K1243XL	OFF		
564-01			CMD	MPS	E-3 LH2	PREVLV	OPEN	CMD A		V41K1519XL	ON		
564-07			CMD	MPS	E-3 LH2	PREVLV	OPEN	CMD A		V41K1519XL	OFF		
564-02			CMD	MPS	E-3 LH2	PREVLV	OPEN	CMD B		V41K1520XL	ON		
564-08			CMD	MPS	E-3 LH2	PREVLV	OPEN	CMD B		V41K1520XL	OFF		
564-03			CMD	MPS	E-3 LH2	PREVLV	OPEN	CMD C		V41K1521XL	ON		
564-09			CMD	MPS	E-3 LH2	PREVLV	OPEN	CMD C		V41K1521XL	OFF		
564-04			CMD	MPS	E-3 LH2	PREVLV	CLOSE	CMD A		V41K1522XL	ON		
704-01			CMD	MPS	MPS E-3	LH2	PREVALVE	CLOSE	CMD A		V41K1522XL	OFF	
564-05			CMD	MPS	E-3 LH2	PREVLV	CLOSE	CMD B		V41K1523XL	ON		
704-02			CMD	MPS	MPS E-3	LH2	PREVALVE	CLOSE	CMD B		V41K1523XL	OFF	
564-06			CMD	MPS	E-3 LH2	PREVLV	CLOSE	CMD C		V41K1524XL	ON		







GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI S9005 - L

DATE 12-10-85

SEQ	TIME	CD	CLOCK	FUNC	DISC	NOMENCLATURE	FUNCTION	SINGL	OR LO	HIGH	UNIT	VALUE	ELSE	DURATION	LCC	PAGE
616-04				VFY	MPS	ME-2 L02 PREVLV CLOSE IND	V41X1435E1	ON								
564-00	ST375			VFY	MPS	ME-3 LH2 PREVLV CLOSE IND	V41X1505E1	OFF								
616-07				VFY	MPS	ME-3 LH2 PREVLV CLOSE IND	V41X1505E1	ON								
563-00				VFY	MPS	ME-3 L02 PREVLV CLOSE IND	V41X1535E1	OFF								
616-06				VFY	MPS	ME-3 L02 PREVLV CLOSE IND	V41X1535E1	ON								
225-06				VFY	MPS	MPS-LH2 FEED DISC VLV CLOSE PWR	V41X1581E1	OFF								6.2.1-12
225-05				VFY	MPS	MPS-LH2 FEED DISC VLV OPEN PWR 0	V41X1582E1	ON								6.2.1-12
249-21				VFY	MPS	MPS LH2 OUTBD FILL VLV CLOSE PWR	V41X1585E1	ON								6.2.1-7
249-22				VFY	MPS	MPS LH2 OUTBD FILL VLV OPEN PWR	V41X1586E1	OFF								6.2.1-7
249-20				VFY	MPS	MPS LH2 OUTBD FILL VLV OPEN	V41X1588E1	OFF								6.2.1-7
249-23				VFY	MPS	MPS LH2 OUTBD FILL VLV CLOSED	V41X1589X1	ON								6.2.1-7
225-12				VFY	MPS	LH2 INBD FILL VALVE CL PWR	V41X1405E1	ON								6.2.1-6
225-11				VFY	MPS	LH2 INBD FILL VALVE OP PWR	V41X1406E1	OFF								6.2.1-6
225-10				VFY	MPS	LH2 INBD FILL VALVE OPEN	V41X1409E1	OFF								6.2.1-6
225-13				VFY	MPS	LH2 INBD FILL VALVE CLOSED	V41X1410X1	ON								6.2.1-6
567-06	ST378			VFY	MPS	ET/ORB 4 IN DISCON PD 3 CLOSED IND	V41X1420E1	OFF								
616-01				VFY	MPS	ET/ORB R IN DISCON PD3 CLOSED IND	V41X1420E1	ON								
225-07				VFY	MPS	MPS-LH2 FEED DISC VLV OPEN	V41X1429X1	ON								
225-08				VFY	MPS	LH2 DISCONNECT CLOSED A	V41X1430X1	OFF								6.2.1-12
225-09				VFY	MPS	LH2 DISCONNECT CLOSED B	V41X1434X1	OFF								6.2.1-12
225-17				VFY	MPS	LH2 FEEDLINE RELIEF SOV OPEN	V41X1441E1	OFF								6.2.1-13
225-19				VFY	MPS	LH2 FEEDLINE RELIEF SOV CLOSED	V41X1442E1	ON								6.2.1-13
225-18				VFY	MPS	LH2 FEEDLINE RELIEF SOV CL PWR	V41X1449E1	ON								6.2.1-13
225-14				VFY	MPS	LH2 TOPPING VALVE OPEN	V41X1455E1	OFF								6.2.1-10
225-16				VFY	MPS	LH2 TOPPING VALVE CLOSED	V41X1456X1	ON								6.2.1-10
225-15				VFY	MPS	LH2 TOPPING VALVE OP PWR	V41X1458E1	OFF								6.2.1-10
225-31				VFY	MPS	L02 INBD FILL VALVE CL PWR	V41X1505E1	ON								6.2.1-8
225-30				VFY	MPS	L02 INBD FILL VALVE OP PWR	V41X1506E1	OFF								6.2.1-8
249-01				VFY	MPS	MPS LOX OTBD FILL VLV CLOSE PWR	V41X1507E1	ON								6.2.1-9
249-02				VFY	MPS	MPS LOX OTBD FILL VLV OPEN PWR 0	V41X1508E1	OFF								6.2.1-9
225-32				VFY	MPS	L02 INBD FILL VALVE CLOSED	V41X1509X1	ON								6.2.1-8
225-29				VFY	MPS	L02 INBD FILL VALVE OPEN	V41X1510E1	OFF								6.2.1-8
249-00				VFY	MPS	MPS L02 OTBD FILL VLV OPEN	V41X1513E1	OFF								6.2.1-9
249-03				VFY	MPS	MPS L02 OTBD FILL VLV CLOSED	V41X1514X1	ON								6.2.1-9
225-02				VFY	MPS	MPS-LOX FEED DISC VLV OPEN	V41X1529X1	ON								6.2.1-12
225-03				VFY	MPS	LOX DISCONNECT CLOSED A	V41X1530X1	OFF								6.2.1-12
225-04				VFY	MPS	LOX DISCONNECT CLOSED B	V41X1534X1	OFF								6.2.1-12
225-26				VFY	MPS	L02 FEEDLINE RELIEF SOV OPEN	V41X1541E1	OFF								6.2.1-13
225-28				VFY	MPS	L02 FEEDLINE RELIEF SOV CLOSED	V41X1542E1	ON								6.2.1-13
225-27				VFY	MPS	L02 FEEDLINE RELIEF SOV CL PWR	V41X1549E1	ON								6.2.1-13
224-04				VFY	L02	ET L02 ECO SENSOR NO. 1	V41X1550X1	WET								6.2.1-16

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
:	CD	:	:	:	:	DESIGNATOR	SINGL	:	:	:	:
:	CLOCK	:	:	:	:	:	OR LO	:	:	:	:
:	:	:	:	:	:	:	HIGH	:	:	:	:
:	:	:	:	:	:	:	UNIT	:	:	:	:
224-05		VFY	L02		ET L02 ECO SENSOR NO. 2	V41X1556X1	WET	INH3	MSEQ		6.2.1-16
224-06		VFY	L02		ET L02 ECO SENSOR NO. 3	V41X1557X1	WET	INH3	MSEQ		6.2.1-16
224-07		VFY	L02		ET L02 ECO SENSOR NO. 4	V41X1558X1	WET	INH3	MSEQ		6.2.1-16
537-01		VFY	MPS		L0X OVBD BLD VLV CLA IND	V41X1580X1	OFF	1 OF 2			
566-01		VFY	MPS		L0X OVBD BLD VLV CLA IND	V41X1580X1	OFF	1 OF 2			
537-02		VFY	MPS		L0X OVBD BLD VLV CLB IND	V41X1581X1	OFF	DISPLAY			
566-02		VFY	MPS		L0X OVBD BLD VLV CLB IND	V41X1581X1	OFF	GTO ST377			
537-00		VFY	MPS		L0X OVBD BLD VLV OP IND	V41X1587E1	ON	DISPLAY			
566-00		VFY	MPS		L0X OVBD BLD VLV OP IND	V41X1587E1	ON	DISPLAY			
616-08		VFY	MPS		L02 OVERBOARD BLEED VALVE OPEN	V41X1587E1	ON	GTO ST377			
225-01		VFY	MPS		MPS-LOX FEED DISC VLV CLOSE PWR	V41X1806E1	OFF	OR			
225-00		VFY	MPS		MPS-LOX FEED DISC VLV OPEN PWR 0	V41X1807E1	ON	OR			6.2.1-12
616-09		VFY	MPS		L02 ACC RECIRC VLV 1 CLOSED	V41X1818E1	ON	2 OF 2			6.2.1-12
616-10		VFY	MPS		L02 ACC RECIRC VLV 2 CLOSED	V41X1828E1	ON	2 OF 2			
225-21		VFY	MPS		LH2 RTLS OTBD D/V OP PWR	V41X1911E1	OFF	DISPLAY			
225-20		VFY	MPS		LH2 RTLS OTBD D/V OPEN	V41X1917E1	OFF	OR			6.2.1-14
225-22		VFY	MPS		LH2 RTLS OTBD D/V CLOSED	V41X1919X1	ON	2 OF 2			6.2.1-14
225-24		VFY	MPS		LH2 RTLS INBD D/V OP PWR	V41X1921E1	OFF	INH3	MSEQ		
225-23		VFY	MPS		LH2 RTLS INBD D/V OPEN	V41X1927E1	OFF	OR			6.2.1-14
225-25		VFY	MPS		LH2 RTLS INBD D/V CLOSED	V41X1929X1	ON	2 OF 2			6.2.1-14
110-09		ICL	HYOX		RCS FWD HE OX TANK PRESS-1	V42P1110C1		INH3	MSEQ		6.2.1-14
113-08		ICL	HYOX		RCS FWD HE OX TANK PRESS-2	V42P1112C1		OR			6.2.1-14
110-15		ICL	HYFU		RCS FWD HE FU TANK PRESS-1	V42P1113C1		2 OF 2			
110-14		ICL	HYFU		RCS FWD HE FU TANK PRESS-2	V42P1114C1		OR			6.2.1-14
110-29		ICL	HYOX		RCS FWD OX TANK ULLAGE PRESS	V42P1115C1		2 OF 2			6.2.1-14
110-28		ICL	HYFU		RCS FWD FU TANK ULLAGE PRESS	V42P1116C1		OR			6.2.1-14
110-60		V	ICL		FRCS PROP TK PRESS	V42P1210C1		INH3	MSEQ		6.2.1-14
110-69		V	ICL		FRCS PROP TK PRESS	V42P1310C1		OR			6.2.1-14
110-03		ICL	HYOX		RCS L AFT HE OX TANK PRESS-1	V42P2110C1		2 OF 2			
110-01		ICL	HYOX		RCS L AFT HE OX TANK PRESS-2	V42P2112C1		OR			6.2.1-14
110-11		ICL	HYFU		RCS L AFT HE FU TANK PRESS-1	V42P2113C1		2 OF 2			
110-10		ICL	HYFU		RCS L AFT HE FU TANK PRESS-2	V42P2114C1		OR			6.2.1-14
110-31		K	ICL		RCS L AFT OX TANK ULLAGE PRESS	V42P2115C1		2 OF 2			6.2.1-14
110-30		K	ICL		RCS L AFT FU TANK ULLAGE PRESS	V42P2116C1		OR			6.2.1-14
110-61		V	ICL		LARC PROP TK PRESS	V42P2210C1		INH3	MSEQ		6.2.1-14
110-70		V	ICL		LARC PROP TK PRESS	V42P2310C1		OR			6.2.1-14
110-07		ICL	HYOX		RCS R AFT HE OX TANK PRESS-1	V42P3110C1		2 OF 2			
110-05		ICL	HYOX		RCS R AFT HE OX TANK PRESS-2	V42P3112C1		OR			6.2.1-14
110-13		ICL	HYFU		RCS R AFT HE FU TANK PRESS-1	V42P3113C1		2 OF 2			
110-12		ICL	HYFU		RCS R AFT HE FU TANK PRESS-2	V42P3114C1		OR			6.2.1-14
110-33		K	ICL		RCS R AFT OX TANK ULLAGE PRESS	V42P3115C1		INH3	MSEQ		6.2.1-14

SEQ	I	TIME	FJNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE	S
:	:	CD	:	:	:	DESIGNATOR	SINGL	:	:	:	:	:
:	:	CLOCK	:	:	:	OR	LO	HIGH	UNIT	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:
110-32	K				RCS R AFT FU TANK ULLAGE PRESS	V42P3116C1						
110-62	V				RARC PROP TK PRESS	V42P3210C1						
110-71	V				RARC PROP TK PRESS	V42P3310C1						
110-22	I				RCS FWD HE OX TANK TEMP-1	V42T1100C1						
110-23	I				RCS FWD HE FU TANK TEMP-1	V42T1104C1						
110-16	I				RCS L AFT HE OX TANK TEMP-1	V42T2100C1						
110-17	I				RCS L AFT HE FU TANK TEMP-1	V42T2104C1						
110-19	I				RCS R AFT HE OX TANK TEMP-1	V42T3100C1						
110-20	I				RCS R AFT HE FU TANK TEMP-1	V42T3104C1						
110-02	I				OVS-L POD HE TANK PRESS 1	V43P4121C1						
110-00	I				OVS-L POD HE TANK PRESS 2	V43P4122C1						
110-63	V				LOMS PROP TK PRESS	V43P4221C1						
110-72	V				LOMS PROP TK PRESS	V43P4321C1						
110-67	V				LGN GN2 TANK PRESS	V43P4347C1						
110-68	V				LGN GN2 TANK PRESS	V43P4348C1						
110-06	I				OVS-R POD HE TANK PRESS 1	V43P5121C1						
110-04	I				OVS-R POD HE TANK PRESS 2	V43P5122C1						
110-64	V				ROMS PROP TK PRESS	V43P5221C1						
110-73	V				ROMS PROP TK PRESS	V43P5321C1						
110-65	V				RGN GN2 TANK PRESS	V43P5347C1						
110-66	V				RGN GN2 TANK PRESS	V43P5348C1						
110-18	I				OVS-L POD HE TANK TEMP-UPPER	V43T4111C1						
110-21	I				OVS-R POD HE TANK TEMP UPPER	V43T5111C1						
205-00	CMD				PRSD 02 GAS SUPPLY VLV - CLOSE	V45K1196NL ON	75			PSIA	LCC-3	6.5.2-4
210-04	CMD				PRSD 02 GAS SUPPLY VLV - CLOSE	V45K1196NL OFF	75			PSIA	LCC-3	6.5.2-4
205-01	CMD				PRSD H2 GAS SUPPLY VLV - CLOSE	V45K2196NL ON	75			PSIA	LCC-3	6.5.2-4
210-05	CMD				PRSD H2 GAS SUPPLY VLV - CLOSE	V45K2196NL OFF	75			PSIA	LCC-3	6.5.2-4
001-26	CVFY				FUEL CELL NO. 1 COOLANT PRESSURE	V45PU147A1 55	NOHI			DEGF	2 OF 3	6.5.2-10
001-27	CVFY				FUEL CELL NO. 2 COOLANT PRESSURE	V45PU247A1 55	NOHI			DEGF	2 OF 3	6.5.2-10
001-28	CVFY				FUEL CELL NO. 3 COOLANT PRESSURE	V45PU347A1 55	NOHI			DEGF	2 OF 3	6.5.2-10
001-33	CVFY				FC1 H2O RELIEF VALVE TEMP	V45TU412A1 65	NOHI			DEGF	LCC-1	6.5.2-10
001-34	CVFY				FC2 H2O RELIEF VALVE TEMP	V45TU422A1 65	NOHI			DEGF	LCC-1	6.5.2-10
001-35	CVFY				FC3 H2O RELIEF VALVE TEMP	V45TU432A1 65	NOHI			DEGF	LCC-1	6.5.2-10
001-36	CVFY				H2O RELIEF LINE TEMP	V45TU450A1 65	NOHI			DEGF	LCC-1	6.5.2-10
001-32	CVFY				FCP H2O RELIEF NOZZLE TEMP B	V45TU450A1 157	235			DEGF	LCC-1	6.5.2-10
109-01	ICL				PRSD 02 TK 1 HTR ASSY 1 TEMP	V45T1107A1						AS
109-03	ICL				PRSD 02 TK 1 HTR ASSY 2 TEMP	V45T1109A1						AS
109-07	ICL				PRSD 02 TK 2 HTR ASSY 1 TEMP	V45T1207A1						AS
109-09	ICL				PRSD 02 TK 2 HTR ASSY 2 TEMP	V45T1209A1						AS
109-18	ICL				PRSD 02 TK 3 HTR ASSY 1 TEMP(MBK)	V45T1307A1						AS
109-19	ICL				PRSD 02 TK 3 HTR ASSY 2 TEMP(MBK)	V45T1309A1						AS

SEQ	S	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PL	
:	:	CD	:	:	:	:	DESIGNATOR	:	:	:	PAGE	:	
:	CLOCK	:	:	:	:	:	OR LO	HIGH	:	:	:	:	
:	:	:	:	:	:	:	:	UNIT	:	:	:	:	
109-27	ICL	FCP	PRSD	02	TK	4	HTR	ASSY	1	TEMP	(MBK)	V45T1407A1	AS
109-28	ICL	FCP	PRSD	02	TK	4	HTR	ASSY	2	TEMP	(MBK)	V45T1409A1	AS
109-34	ICL	FCP	PRSD	02	TK	5	HTR	ASSY	1	TEMP	(MBK)	V45T1507A1	PL
109-35	ICL	FCP	PRSD	02	TK	5	HTR	ASSY	2	TEMP	(MBK)	V45T1509A1	PL
109-12	ICL	FCP	PRSD	H2	TK	1	HTR	ASSY	TEMP			V45T2107A1	AS
109-15	ICL	FCP	PRSD	H2	TK	2	HTR	ASSY	TEMP			V45T2207A1	AS
109-24	ICL	FCP	PRSD	H2	TK	3	HTR	ASSY	TEMP	(MBK)		V45T2307A1	AS
109-31	ICL	FCP	PRSD	H2	TK	4	HTR	ASSY	TEMP	(MBK)		V45T2407A1	AS
109-38	ICL	FCP	PRSD	H2	TK	5	HTR	ASSY	TEMP	(MBK)		V45T2507A1	AS
010-19	CVFY	FCP	FUEL	CELL	NO	1	VOLTAGE					NOLO	AS
001-37	CVFY	FCP	FCP	NO	1	SUBSTACK	1	DELTA	VOLTAGE			NOLO	AS
001-38	CVFY	FCP	FCP	NO	1	SUBSTACK	2	DELTA	VOLTAGE			NOLO	AS
001-39	CVFY	FCP	FCP	NO	1	SUBSTACK	3	DELTA	VOLTAGE			NOLO	AS
010-21	CVFY	FCP	FUEL	CELL	NO	2	VOLTAGE					NOLO	AS
001-40	CVFY	FCP	FCP	NO	2	SUBSTACK	1	DELTA	VOLTAGE			NOLO	AS
001-41	CVFY	FCP	FCP	NO	2	SUBSTACK	2	DELTA	VOLTAGE			NOLO	AS
001-42	CVFY	FCP	FCP	NO	2	SUBSTACK	3	DELTA	VOLTAGE			NOLO	AS
010-23	CVFY	FCP	FUEL	CELL	NO	3	VOLTAGE					NOLO	AS
001-43	CVFY	FCP	FCP	NO	3	SUBSTACK	1	DELTA	VOLTAGE			NOLO	AS
001-44	CVFY	FCP	FCP	NO	3	SUBSTACK	2	DELTA	VOLTAGE			NOLO	AS
001-45	CVFY	FCP	FCP	NO	3	SUBSTACK	3	DELTA	VOLTAGE			NOLO	AS
001-29	CVFY	FCP	FUEL	CELL	NO	1	COOLANT	PUMP	STAT			ON	AS
001-30	CVFY	FCP	FUEL	CELL	NO	2	COOLANT	PUMP	STAT			ON	AS
001-31	CVFY	FCP	FUEL	CELL	NO	3	COOLANT	PUMP	STAT			ON	AS
109-0J	ICL	FCP	PRSD	02	TK	1	HTR	A1	ON			V45XU106E1	PL
109-02	ICL	FCP	PRSD	02	TK	1	HTR	B1	ON			V45X1108E1	PL
109-04	ICL	FCP	PRSD	02	TK	1	HTR	A2	ON			V45X1111E1	PL
109-05	ICL	FCP	PRSD	02	TK	1	HTR	B2	ON			V45X1115E1	PL
001-20	CVFY	FCP	PRSD	FCP	1	02	REAC	VLV	-	OPEN		ON	PL
117-00	ACL	FCP	PRSD	FCP	1	02	REAC	VLV	-	OPEN		ON	PL
248-00	ICL	FCP	PRSD	FCP	1	02	REAC	VLV	-	OPEN		OFF	PL
001-22	CVFY	FCP	PRSD	FCP	2	02	REAC	VLV	-	OPEN		ON	PL
117-01	ACL	FCP	PRSD	FCP	2	02	REAC	VLV	-	OPEN		OFF	PL
248-02	ICL	FCP	PRSD	FCP	2	02	REAC	VLV	-	OPEN		OFF	PL
001-24	CVFY	FCP	PRSD	FCP	3	02	REAC	VLV	-	OPEN		ON	PL
117-02	ACL	FCP	PRSD	FCP	3	02	REAC	VLV	-	OPEN		ON	PL
248-04	ICL	FCP	PRSD	FCP	3	02	REAC	VLV	-	OPEN		OFF	PL
001-00	CVFY	FCP	PRSD	02	TK	1	HTR	CUR	SENR	1A	-	OFF	PL
001-02	CVFY	FCP	PRSD	02	TK	1	HTR	CUR	SENR	2A	-	OFF	PL
001-01	CVFY	FCP	PRSD	02	TK	1	HTR	CUR	SENR	1B	-	OFF	PL
001-03	CVFY	FCP	PRSD	02	TK	1	HTR	CUR	SENR	2B	-	OFF	PL

SEQ	TIME	CD	CL	FUNC	DISC	NOMENCLATURE	PRSD	GAS	SPLY	VLV	STATUS	VALUE	ELSE	DURATION	UNIT	AS
207-00				VFY	FCP	PRSD 02	GAS	SPLY	VLV	CLOSED						
109-06				ICL	FCP	PRSD 02	TK 2	HTR	A1-ON					6.5.1-7		
109-08				ICL	FCP	PRSD 02	TK 2	HTR	B1-ON							
109-10				ICL	FCP	PRSD 02	TK 2	HTR	A2-ON							
109-11				ICL	FCP	PRSD 02	TK 2	HTR	B2-ON							
001-04				CVFY	FCP	PRSD 02	TK 2	HTR	CUR	SENR 1A-TRI	OFF	2 OF 2		6.5.1-6		
001-06				CVFY	FCP	PRSD 02	TK 2	HTR	CUR	SENR 2A-TRI	OFF	2 OF 2		6.5.1-6		
001-05				CVFY	FCP	PRSD 02	TK 2	HTR	CUR	SENR 1B-TRI	OFF	OR		6.5.1-6		
001-07				CVFY	FCP	PRSD 02	TK 2	HTR	CUR	SENR 2B-TRI	OFF	LCC-3		6.5.1-6		
109-20				ICL	FCP	PRSD 02	TK 3	HTR	A1-ON	(MBK)						
109-21				ICL	FCP	PRSD 02	TK 3	HTR	B1-ON	(MBK)						
109-22				ICL	FCP	PRSD 02	TK 3	HTR	A2-ON	(MBK)						
109-23				ICL	FCP	PRSD 02	TK 3	HTR	B2-ON	(MBK)						
001-08				CVFY	FCP	PRSD 02	TK 3	HTR	CUR	SENR 1A-TRI	OFF	2 OF 2		6.5.1-6		
001-10				CVFY	FCP	PRSD 02	TK 3	HTR	CUR	SENR 2A-TRI	OFF	2 OF 2		6.5.1-6		
001-09				CVFY	FCP	PRSD 02	TK 3	HTR	CUR	SENR 1B-TRI	OFF	OR		6.5.1-6		
001-11				CVFY	FCP	PRSD 02	TK 3	HTR	CUR	SENR 2B-TRI	OFF	LCC-3		6.5.1-6		
109-29				ICL	FCP	PRSD 02	TK 4	HTR	A1-ON	(MBK)						
109-36				ICL	FCP	PRSD 02	TK 4/5	HTR	B1/A1-ON							
109-30				ICL	FCP	PRSD 02	TK 4	HTR	A2-ON	(MBK)						
109-37				ICL	FCP	PRSD 02	TK 4/5	HTR	B2/A2-ON							
001-12				CVFY	FCP	PRSD 02	TK 4	HTR	CUR	SENR 1A-TRI	OFF	2 OF 2		6.5.1-6		
001-14				CVFY	FCP	PRSD 02	TK 4	HTR	CUR	SENR 2A-TRI	OFF	2 OF 2		6.5.1-6		
001-13				CVFY	FCP	PRSD 02	TK 4/5	HTR	CUR	SENR 1B/1A	OFF	OR		6.5.1-6		
001-15				CVFY	FCP	PRSD 02	TK 4/5	HTR	CUR	SENR 2B/2A	OFF	LCC-3		6.5.1-6		
109-13				ICL	FCP	PRSD H2	TK 1	HTR	A-ON							
109-14				ICL	FCP	PRSD H2	TK 1	HTR	B-ON							
001-21				CVFY	FCP	PRSD FCP 1	H2	REAC	VLV	- OPEN				6.5.1-5		
117-03				ACL	FCP	PRSD FCP 1	H2	REAC	VLV	- OPEN						
248-01				ICL	FCP	PRSD FCP 2	H2	REAC	VLV	- OPEN						
001-23				CVFY	FCP	PRSD FCP 2	H2	REAC	VLV	- OPEN				6.5.1-5		
117-04				ACL	FCP	PRSD FCP 2	H2	REAC	VLV	- OPEN						
248-03				ICL	FCP	PRSD FCP 2	H2	REAC	VLV	- OPEN						
001-25				CVFY	FCP	PRSD FCP 3	H2	REAC	VLV	- OPEN				6.5.1-5		
117-05				ACL	FCP	PRSD FCP 3	H2	REAC	VLV	- OPEN						
248-05				ICL	FCP	PRSD FCP 3	H2	REAC	VLV	- OPEN						
207-01				VFY	FCP	PRSD H2	GAS	SPLY	VLV	- CLOSED				6.5.1-7		
109-16				ICL	FCP	PRSD H2	TK 2	HEATER	A-ON							
109-17				ICL	FCP	PRSD H2	TK 2	HEATER	B-ON							
109-25				ICL	FCP	PRSD H2	TK 3	HTR	A-ON	(MRK)						
109-26				ICL	FCP	PRSD H2	TK 3	HTR	B-ON	(MRK)						

DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S9005 - L :

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	DESIGNATOR	SINGL	OR	LO	HIGH	UNIT	ELSE	DURATION	LGC	PAGE
109-32		ICL	FCP		PRSD H2 TK 5 HTR A-ON (MBK)	V45X2456E1											
109-33		ICL	FCP		APU 1 GRB TK 5 HTR B-ON (MBK)	V45X2458E1											
162-00		CVFY	APU		APU 1 GN2 BOTTLE PRESS	V46PU152A1	5.5	PSIA						INHB	MSEQ		6.6-22
015-12		CVFY	APU		APU 1 GN2 BOTTLE PRESS	V46PU152A1	115	NOHI						LCC-3			6.6-25
044-01		CVFY	APU		APU 1 GRBX LUBE OIL OUTPRESS	V46PU153A1	N0L0	PSIA						INHB	MAPU		6.6-22
162-01		CVFY	APU		APU 1 GRBX LUBE OIL OUTPRESS	V46PU153A1	N0L0	PSIA						INHB	MSEQ		6.6-22
016-06		CVFY	APU		APU 1 FU PMP DRN LN P-1	V46PU190A1	N0L0	PSIA						1 OF 2			6.6-32
016-07		CVFY	APU		APU 1 FU PMP DRN LN P-2	V46PU191A1	N0L0	PSIA						LCC-3			6.6-32
162-02		CVFY	APU		APU 2 GRBX GN2 PRESS	V46PU252A1	5.5	PSIA						INHB	MSEQ		6.6-22
016-13		CVFY	APU		APU 2 GN2 BOTTLE PRESS	V46PU252A1	115	NOHI						LCC-3			6.6-25
044-03		CVFY	APU		APU 2 GRBX LUBE OIL OUTPRESS	V46PU253A1	N0L0	PSIA						INHB	MAPU		6.6-22
162-03		CVFY	APU		APU 2 GRBX LUBE OIL OUTPRESS	V46PU253A1	N0L0	PSIA						INHB	MSEQ		6.6-22
015-08		CVFY	APU		APU 2 FU PMP DRN LN P-1	V46PU290A1	N0L0	PSIA						1 OF 2			6.6-32
016-09		CVFY	APU		APU 2 FU PMP DRN LN P-2	V46PU291A1	N0L0	PSIA						LCC-3			6.6-32
162-04		CVFY	APU		APU 3 GRBX GN2 PRESS	V46PU351A1	5.5	PSIA						INHB	MSEQ		6.6-22
016-14		CVFY	APU		APU 3 GN2 BOTTLE PRESS	V46PU352A1	115	NOHI						LCC-3			6.6-25
044-05		CVFY	APU		APU 3 GRBX LUBE OIL OUTPRESS	V46PU353A1	N0L0	PSIA						INHB	MAPU		6.6-22
162-05		CVFY	APU		APU 3 GRBX LUBE OIL OUTPRESS	V46PU353A1	N0L0	PSIA						INHB	MSEQ		6.6-22
016-10		CVFY	APU		APU 3 FU PMP DRN LN P-1	V46PU390A1	N0L0	PSIA						1 OF 2			6.6-32
016-11		CVFY	APU		APU 3 FU PMP DRN LN P-2	V46PU391A1	N0L0	PSIA						LCC-3			6.6-32
016-00		CVFY	APU		APU1 GAS GENERATOR BED TEMP	V46TU122A1	204	DEGF						1 OF 2			6.6-13
139-01		CVFY	APU		APU-1 TURBINE EXHAUST TEMP NO. 2	V46TU140A1	N0L0	DEGF						INHB	MSEQ		6.6-18
139-00		CVFY	APJ		APU-1 TURBINE EXHAUST TEMP NO. 1	V46TU142A1	N0L0	DEGF						1 OF 2			6.6-18
139-07		CVFY	APU		APU-1 GEARBOX LUBE OIL RETURN TE	V46TU150A1	N0L0	DEGF						INHB	MSEQ		6.6-20
139-06		CVFY	APU		APU-1 GEARBOX LUBE OIL OUT TEMP	V46TU154A1	N0L0	DEGF						1 OF 2			6.6-20
170-02		CVFY	APU		APU 1 GEARBOX BEARING TEMP NO 1	V46TU161A1	N0L0	DEGF						1 OF 2			6.6-20
170-03		CVFY	APU		APU 1 GEARBOX BEARING TEMP NO 2	V46TU162A1	N0L0	DEGF						INHB	MSEQ		6.6-24A
015-01		CVFY	APU		APU1 INJECT TUBE TEMP	V46TU174A1	204	DEGF						LCC-2			6.6-13
016-02		CVFY	APU		APU2 GAS GENERATOR BED TEMP	V46TU224A1	204	DEGF						1 OF 2			6.6-13
139-03		CVFY	APU		APU-2 TURBINE EXHAUST TEMP NO. 2	V46TU240A1	N0L0	DEGF						INHB	MSEQ		6.6-18
139-02		CVFY	APU		APU-2 TURBINE EXHAUST TEMP NO. 1	V46TU242A1	N0L0	DEGF						1 OF 2			6.6-18
139-09		CVFY	APU		APU-2 GEARBOX LUBE OIL RETURN TE	V46TU250A1	N0L0	DEGF						INHB	MSEQ		6.6-20
139-08		CVFY	APU		APU-2 GEARBOX LUBE OIL OUT TEMP	V46TU254A1	N0L0	DEGF						1 OF 2			6.6-20
170-04		CVFY	APU		APU 2 GEARBOX BEARING TEMP NO 1	V46TU261A1	N0L0	DEGF						1 OF 2			6.6-20
170-05		CVFY	APU		APU 2 GEARBOX BEARING TEMP NO 2	V46TU262A1	N0L0	DEGF						INHB	MSEQ		6.6-24A
016-03		CVFY	APU		APU2 INJECT TUBE TEMP	V46TU274A1	204	DEGF						LCC-2			6.6-13
016-04		CVFY	APU		APU3 GAS GENERATOR BED TEMP	V46TU322A1	204	DEGF						1 OF 2			6.6-13
139-05		CVFY	APU		APU-3 TURBINE EXHAUST TEMP NO. 2	V46TU340A1	N0L0	DEGF						INHB	MSEQ		6.6-18
139-04		CVFY	APU		APU-3 TURBINE EXHAUST TEMP NO. 1	V46TU342A1	N0L0	DEGF						1 OF 2			6.6-18
139-11		CVFY	APU		APU-3 GEARBOX LUBE OIL RETURN TE	V46TU350A1	N0L0	DEGF						INHB	MSEQ		6.6-20
139-10		CVFY	APU		APU-3 GEARBOX LUBE OIL OUT TEMP	V46TU354A1	N0L0	DEGF						1 OF 2			6.6-20

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	SINGL	VALUE	ELSE	DURATION	LCC	PAGE
:S	:T	:C	:D	:E		:OR	LO:HIGH	UNIT				
170-06			CVFY	APU	APU 3 GRBX BEARING TEMP NO 1	V40TUS01A1	NOL0	335		1 OF 2		6.6-24A
170-07			CVFY	APU	APU 3 GRBX BEARING TEMP NO 2	V40TUS02A1	NOL0	335		INHB MSEQ		6.6-24A
016-05			CVFY	APU	APU3 INJECT TUBE TEMP	V40TUS74A1	204	436		LCC-2		6.6-13
105-00			ICL	FCL	BODY FLAP POSN FDBK-3	V57HU067C1						
105-01			ICL	FCL	BODY FLAP POSN FDBK-4	V57HU068C1						
190-16			VFY	FCL	RUDDER ACTR CHAN 1 POSN	V57HU13UA1	-0.95	0.95		INHB MSEQ		6.9.10-19
803-16			VFY	FCL	RUDDER ACTR CHAN 1 POSN	V57HU13UA1	1	NOHI		1 OF 4		
804-16			VFY	FCL	RUDDER ACTR CHAN 1 POSN	V57HU13UA1	NOL0	-1		1 OF 4		
805-16			VFY	FCL	RUDDER ACTR CHAN 1 POSN	V57HU13UA1	-0.95	0.95		1 OF 4		
190-17			VFY	FCL	RUDDER ACTR CHAN 2 POSN	V57HU131A1	-0.95	0.95		INHB MSEQ		6.9.10-19
803-17			VFY	FCL	RUDDER ACTR CHAN 2 POSN	V57HU131A1	1	NOHI		1 OF 4		
804-17			VFY	FCL	RUDDER ACTR CHAN 2 POSN	V57HU131A1	NOL0	-1		1 OF 4		
805-17			VFY	FCL	RUDDER ACTR CHAN 2 POSN	V57HU131A1	-0.95	0.95		1 OF 4		
190-18			VFY	FCL	RUDDER ACTR CHAN 3 POSN	V57HU132A1	-0.95	0.95		INHB MSEQ		6.9.10-19
803-18			VFY	FCL	RUDDER ACTR CHAN 3 POSN	V57HU132A1	1	NOHI		1 OF 4		
804-18			VFY	FCL	RUDDER ACTR CHAN 3 POSN	V57HU132A1	NOL0	-1		1 OF 4		
805-18			VFY	FCL	RUDDER ACTR CHAN 3 POSN	V57HU132A1	-0.95	0.95		1 OF 4		
190-19			VFY	FCL	RUDDER ACTR CHAN 4 POSN	V57HU133A1	-0.95	0.95		INHB MSEQ		6.9.10-19
803-19			VFY	FCL	RUDDER ACTR CHAN 4 POSN	V57HU133A1	1	NOHI		1 OF 4		
804-19			VFY	FCL	RUDDER ACTR CHAN 4 POSN	V57HU133A1	NOL0	-1		1 OF 4		
805-19			VFY	FCL	RUDDER ACTR CHAN 4 POSN	V57HU133A1	-0.95	0.95		1 OF 4		
190-20			VFY	FCL	SPEEDBRAKE ACTR CHAN 1 POSN	V57HU025UA1	2.45	7.55		INHB MSEQ		6.9.10-19
803-20			VFY	FCL	SPEEDBRAKE ACTR CHAN 1 POSN	V57HU025UA1	5	NOHI		1 OF 4		
804-20			VFY	FCL	SPEEDBRAKE ACTR CHAN 1 POSN	V57HU025UA1	NOL0	4		1 OF 4		
805-20			VFY	FCL	SPEEDBRAKE ACTR CHAN 1 POSN	V57HU025UA1	2.45	7.55		1 OF 4		
190-21			VFY	FCL	SPEEDBRAKE ACTR CHAN 2 POSN	V57HU025UA1	2.45	7.55		INHB MSEQ		6.9.10-19
803-21			VFY	FCL	SPEEDBRAKE ACTR CHAN 2 POSN	V57HU025UA1	6	NOHI		1 OF 4		
804-21			VFY	FCL	SPEEDBRAKE ACTR CHAN 2 POSN	V57HU025UA1	NOL0	4		1 OF 4		
805-21			VFY	FCL	SPEEDBRAKE ACTR CHAN 2 POSN	V57HU025UA1	2.45	7.55		1 OF 4		
190-22			VFY	FCL	SPEEDBRAKE ACTR CHAN 3 POSN	V57HU025UA1	2.45	7.55		INHB MSEQ		6.9.10-19
803-22			VFY	FCL	SPEEDBRAKE ACTR CHAN 3 POSN	V57HU025UA1	6	NOHI		1 OF 4		
804-22			VFY	FCL	SPEEDBRAKE ACTR CHAN 3 POSN	V57HU025UA1	NOL0	4		1 OF 4		
805-2			VFY	FCL	SPEEDBRAKE ACTR CHAN 3 POSN	V57HU025UA1	2.45	7.55		1 OF 4		
190-23			VFY	FCL	SPEEDBRAKE ACTR CHAN 4 POSN	V57HU025UA1	2.45	7.55		INHB MSEQ		6.9.10-19
803-23			VFY	FCL	SPEEDBRAKE ACTR CHAN 4 POSN	V57HU025UA1	6	NOHI		1 OF 4		
804-23			VFY	FCL	SPEEDBRAKE ACTR CHAN 4 POSN	V57HU025UA1	NOL0	4		1 OF 4		
805-23			VFY	FCL	SPEEDBRAKE ACTR CHAN 4 POSN	V57HU025UA1	2.45	7.55		1 OF 4		
180-00			CVFY	FCL	RUDDER DELTA PRESS 1	V57PU10UA1	-850	850		INHB MSEQ		6.9.10-8
			SUM		RUDDER DELTA PRESS 1	V57PU10UA1				INHB MSEQ		6.9.10-8
180-01			CVFY	FCL	RUDDER DELTA PRESS 2	V57PU101A1	-850	850		INHB MSEQ		6.9.10-8
			SUM		RUDDER DELTA PRESS 2	V57PU101A1				INHB MSEQ		6.9.10-8

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI S9005 - L

DATE	TIME	CD	CLOCK	SEQ	TIME	CD	CLOCK	FUNC:DISC	NOMENCLATURE	FUNCTION	VALUE	PSID	ELSE	DURATION	LCC	
12-10-85										DESIGNATOR	OR LO:HIGH	UNIT				
180-02	CVFY	FCL			RUDDER	DELTA	PRESS	3		V57PU162A1	-850	850	PSID	INH3	MSEQ	6.9.10-8
	SJM				RUDDER	DELTA	PRESS	3	SUM7	V57PU162A1						
180-03	CVFY	FCL			RUDDER	DELTA	PRESS	4		V57PU163A1	-850	850	PSID	INH3	MSEQ	6.9.10-8
	SJM				RUDDER	DELTA	PRESS	4	SUM7	V57PU163A1						
180-04	CVFY	FCL			SPEEDBRAKE	DELTA	PRESS	1		V57PU260A1	-850	850	PSID	INH3	MSEQ	6.9.10-8
	SJM				SPEEDBRAKE	DELTA	PRESS	1	SUMB	V57PU260A1						
180-05	CVFY	FCL			SPEEDBRAKE	DELTA	PRESS	2		V57PU261A1	-850	850	PSID	INH3	MSEQ	6.9.10-8
	SJM				SPEEDBRAKE	DELTA	PRESS	2	SUMB	V57PU261A1						
180-06	CVFY	FCL			SPEEDBRAKE	DELTA	PRESS	3		V57PU262A1	-850	850	PSID	INH3	MSEQ	6.9.10-8
	SJM				SPEEDBRAKE	DELTA	PRESS	3	SUMB	V57PU262A1						
180-07	CVFY	FCL			SPEEDBRAKE	DELTA	PRESS	4		V57PU263A1	-850	850	PSID	INH3	MSEQ	6.9.10-8
	SJM				SPEEDBRAKE	DELTA	PRESS	4	SUMB	V57PU263A1						
190-00	CVFY	FCL			L INBD	ELEVON	ACTR	CHAN 1	POSN	V58HU602A1	-0.52	1.18	DEG	INH3	MSEQ	6.9.10-10
	VFY	FCL			L INBD	ELEVON	ACTR	CHAN 1	POSN	V58HU602A1	1	NOHI	DEG	1 OF 4		
804-00	VFY	FCL			L INBD	ELEVON	ACTR	CHAN 1	POSN	V58HU602A1	N0L0	-1	DEG	1 OF 4		
805-00	VFY	FCL			L INBD	ELEVON	ACTR	CHAN 1	POSN	V58HU602A1	-0.52	1.18	DEG	1 OF 4		
190-01	CVFY	FCL			L INBD	ELEVON	ACTR	CHAN 2	POSN	V58HU603A1	-0.52	1.18	DEG	INH3	MSEQ	6.9.10-10
	VFY	FCL			L INBD	ELEVON	ACTR	CHAN 2	POSN	V58HU603A1	1	NOHI	DEG	1 OF 4		
803-01	VFY	FCL			L INBD	ELEVON	ACTR	CHAN 2	POSN	V58HU603A1	N0L0	-1	DEG	1 OF 4		
804-01	VFY	FCL			L INBD	ELEVON	ACTR	CHAN 2	POSN	V58HU603A1	-0.52	1.18	DEG	1 OF 4		
805-01	VFY	FCL			L INBD	ELEVON	ACTR	CHAN 2	POSN	V58HU603A1	-0.52	1.18	DEG	1 OF 4		
105-02	ICL	FCL			L INBD	ELEVON	ATR	CHAN 3	POSN	V58HU804A1						
190-02	CVFY	FCL			L INBD	ELEVON	ACTR	CHAN 3	POSN	V58HU804A1	-0.52	1.18	DEG	INH3	MSEQ	6.9.10-10
	VFY	FCL			L INBD	ELEVON	ACTR	CHAN 3	POSN	V58HU804A1	1	NOHI	DEG	1 OF 4		
803-02	VFY	FCL			L INBD	ELEVON	ACTR	CHAN 3	POSN	V58HU804A1	N0L0	-1	DEG	1 OF 4		
804-02	VFY	FCL			L INBD	ELEVON	ACTR	CHAN 3	POSN	V58HU804A1	-0.52	1.18	DEG	1 OF 4		
805-02	VFY	FCL			L INBD	ELEVON	ACTR	CHAN 3	POSN	V58HU804A1	-0.52	1.18	DEG	1 OF 4		
105-03	ICL	FCL			L INBD	ELEVON	ATR	CHAN 4	POSN	V58HU805A1						
190-03	CVFY	FCL			L INBD	ELEVON	ACTR	CHAN 4	POSN	V58HU805A1	-0.52	1.18	DEG	INH3	MSEQ	6.9.10-10
	VFY	FCL			L INBD	ELEVON	ACTR	CHAN 4	POSN	V58HU805A1	1	NOHI	DEG	1 OF 4		
804-03	VFY	FCL			L INBD	ELEVON	ACTR	CHAN 4	POSN	V58HU805A1	N0L0	-1	DEG	1 OF 4		
805-03	VFY	FCL			L INBD	ELEVON	ACTR	CHAN 4	POSN	V58HU805A1	-0.52	1.18	DEG	1 OF 4		
190-04	CVFY	FCL			L OUTBD	ELEVON	ACTR	CHAN 1	POSN	V58HU852A1	-0.35	1.34	DEG	INH3	MSEQ	6.9.10-10
	VFY	FCL			L OUTBD	ELEVON	ACTR	CHAN 1	POSN	V58HU852A1	1	NOHI	DEG	1 OF 4		
803-04	VFY	FCL			L OUTBD	ELEVON	ACTR	CHAN 1	POSN	V58HU852A1	-0.36	1.34	DEG	1 OF 4		
804-04	VFY	FCL			L OUTBD	ELEVON	ACTR	CHAN 1	POSN	V58HU852A1	-0.36	1.34	DEG	1 OF 4		
805-04	VFY	FCL			L OUTBD	ELEVON	ACTR	CHAN 1	POSN	V58HU852A1	-0.36	1.34	DEG	1 OF 4		
190-05	CVFY	FCL			L OUTBD	ELEVON	ACTR	CHAN 2	POSN	V58HU853A1	-0.36	1.34	DEG	INH3	MSEQ	6.9.10-10
	VFY	FCL			L OUTBD	ELEVON	ACTR	CHAN 2	POSN	V58HU853A1	1	NOHI	DEG	1 OF 4		
803-05	VFY	FCL			L OUTBD	ELEVON	ACTR	CHAN 2	POSN	V58HU853A1	N0L0	-1	DEG	1 OF 4		
804-05	VFY	FCL			L OUTBD	ELEVON	ACTR	CHAN 2	POSN	V58HU853A1	-0.36	1.34	DEG	1 OF 4		
805-05	VFY	FCL			L OUTBD	ELEVON	ACTR	CHAN 2	POSN	V58HU853A1	-0.36	1.34	DEG	1 OF 4		
105-06	ICL	FCL			L OUTBD	ELEVON	ATR	CHAN 3	POSN	V58HU854A1						
190-06	CVFY	FCL			L OUTBD	ELEVON	ACTR	CHAN 3	POSN	V58HU854A1	-0.36	1.34	DEG	INH3	MSEQ	6.9.10-10
	VFY	FCL			L OUTBD	ELEVON	ACTR	CHAN 3	POSN	V58HU854A1	1	NOHI	DEG	1 OF 4		



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SEQ	TIME	I	S	FJNC	DISC	NOMENCLATURE	FUNCTION	SINGL	OR	LO	HIGH	UNIT	ELSE	DURATION	LCC	PAGE
:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:

804-06	VFY	FCL	L	OUTBD	ELEVON	ACTR	CHAN	3	POSN	V58HU854A1	NOLO	-1	DEG	1	OF	4
805-06	VFY	FCL	L	OUTBD	ELEVON	ACTR	CHAN	3	POSN	V58HU654A1	-0.36	1.34	DEG	1	OF	4
190-05	ICL	FCL	L	OUTBD	ELEVON	ATR	CHAN	4	POSN	V58HU855A1						
190-07	CVFY	FCL	L	OUTBD	ELEVON	ACTR	CHAN	4	POSN	V58HU855A1	-0.36	1.34	DEG	INH3	MSEQ	6.9.10-10
803-07	VFY	FCL	L	OUTBD	ELEVON	ACTR	CHAN	4	POSN	V58HU855A1	1	NOHI	DEG	INH3	MSEQ	
804-07	VFY	FCL	L	OUTBD	ELEVON	ACTR	CHAN	4	POSN	V58HU855A1	NOLO	-1	DEG	INH3	MSEQ	
805-07	VFY	FCL	L	OUTBD	ELEVON	ACTR	CHAN	4	POSN	V58HU855A1	-0.36	1.34	DEG	INH3	MSEQ	6.9.10-10
190-08	CVFY	FCL	R	INBD	ELEVON	ACTR	CHAN	1	POSN	V58HU702A1	-0.52	1.18	DEG	INH3	MSEQ	
803-08	VFY	FCL	R	INBD	ELEVON	ACTR	CHAN	1	POSN	V58HU702A1	1	NOHI	DEG	INH3	MSEQ	6.9.10-10
804-08	VFY	FCL	R	INBD	ELEVON	ACTR	CHAN	1	POSN	V58HU702A1	NOLO	-1	DEG	1	OF	4
805-08	VFY	FCL	R	INBD	ELEVON	ACTR	CHAN	1	POSN	V58HU702A1	-0.52	1.18	DEG	1	OF	4
190-09	CVFY	FCL	R	INBD	ELEVON	ACTR	CHAN	2	POSN	V58HU703A1	-0.52	1.18	DEG	INH3	MSEQ	6.9.10-10
803-09	VFY	FCL	R	INBD	ELEVON	ACTR	CHAN	2	POSN	V58HU703A1	1	NOHI	DEG	INH3	MSEQ	
804-09	VFY	FCL	R	INBD	ELEVON	ACTR	CHAN	2	POSN	V58HU703A1	NOLO	-1	DEG	1	OF	4
805-09	VFY	FCL	R	INBD	ELEVON	ACTR	CHAN	2	POSN	V58HU703A1	-0.52	1.18	DEG	1	OF	4
105-06	ICL	FCL	R	INBD	ELEVON	ACTR	CHAN	3	POSN	V58HU704A1						
190-10	CVFY	FCL	R	INBD	ELEVON	ACTR	CHAN	3	POSN	V58HU704A1	-0.52	1.18	DEG	INH3	MSEQ	6.9.10-10
803-10	VFY	FCL	R	INBD	ELEVON	ACTR	CHAN	3	POSN	V58HU704A1	1	NOHI	DEG	INH3	MSEQ	
804-10	VFY	FCL	R	INBD	ELEVON	ACTR	CHAN	3	POSN	V58HU704A1	NOLO	-1	DEG	1	OF	4
805-10	VFY	FCL	R	INBD	ELEVON	ACTR	CHAN	3	POSN	V58HU704A1	-0.52	1.18	DEG	1	OF	4
190-07	ICL	FCL	R	INBD	ELEVON	ACTR	CHAN	4	POSN	V58HU705A1						
190-11	CVFY	FCL	R	INBD	ELEVON	ACTR	CHAN	4	POSN	V58HU705A1	-0.52	1.18	DEG	INH3	MSEQ	6.9.10-10
803-11	VFY	FCL	R	INBD	ELEVON	ACTR	CHAN	4	POSN	V58HU705A1	1	NOHI	DEG	INH3	MSEQ	
804-11	VFY	FCL	R	INBD	ELEVON	ACTR	CHAN	4	POSN	V58HU705A1	NOLO	-1	DEG	INH3	MSEQ	6.9.10-10
805-11	VFY	FCL	R	INBD	ELEVON	ACTR	CHAN	4	POSN	V58HU705A1	-0.52	1.18	DEG	INH3	MSEQ	
190-12	CVFY	FCL	R	OUTBD	ELEVON	ACTR	CHAN	1	POSN	V58HU752A1	-0.36	1.34	DEG	INH3	MSEQ	6.9.10-10
803-12	VFY	FCL	R	OUTBD	ELEVON	ACTR	CHAN	1	POSN	V58HU752A1	1	NOHI	DEG	INH3	MSEQ	
804-12	VFY	FCL	R	OUTBD	ELEVON	ACTR	CHAN	1	POSN	V58HU752A1	NOLO	-1	DEG	1	OF	4
805-12	VFY	FCL	R	OUTBD	ELEVON	ACTR	CHAN	1	POSN	V58HU752A1	-0.36	1.34	DEG	1	OF	4
190-13	CVFY	FCL	R	OUTBD	ELEVON	ACTR	CHAN	2	POSN	V58HU753A1	-0.36	1.34	DEG	INH3	MSEQ	6.9.10-10
803-13	VFY	FCL	R	OUTBD	ELEVON	ACTR	CHAN	2	POSN	V58HU753A1	1	NOHI	DEG	INH3	MSEQ	
804-13	VFY	FCL	R	OUTBD	ELEVON	ACTR	CHAN	2	POSN	V58HU753A1	NOLO	-1	DEG	1	OF	4
805-13	VFY	FCL	R	OUTBD	ELEVON	ACTR	CHAN	2	POSN	V58HU753A1	-0.36	1.34	DEG	1	OF	4
105-08	ICL	FCL	R	OUTBD	ELEVON	ACTR	CHAN	3	POSN	V58HU754A1						
190-14	CVFY	FCL	R	OUTBD	ELEVON	ACTR	CHAN	3	POSN	V58HU754A1	-0.36	1.34	DEG	INH3	MSEQ	6.9.10-10
803-14	VFY	FCL	R	OUTBD	ELEVON	ACTR	CHAN	3	POSN	V58HU754A1	1	NOHI	DEG	INH3	MSEQ	
804-14	VFY	FCL	R	OUTBD	ELEVON	ACTR	CHAN	3	POSN	V58HU754A1	NOLO	-1	DEG	1	OF	4
805-14	VFY	FCL	R	OUTBD	ELEVON	ACTR	CHAN	3	POSN	V58HU754A1	-0.36	1.34	DEG	1	OF	4
105-09	ICL	FCL	R	OUTBD	ELEVON	ACTR	CHAN	4	POSN	V58HU755A1						
190-15	CVFY	FCL	R	OUTBD	ELEVON	ACTR	CHAN	4	POSN	V58HU755A1	-0.36	1.34	DEG	INH3	MSEQ	6.9.10-10
803-15	VFY	FCL	R	OUTBD	ELEVON	ACTR	CHAN	4	POSN	V58HU755A1	1	NOHI	DEG	INH3	MSEQ	

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	SINGL	OR	LO	HIGH	UNIT	VALUE	ELSE	DURATION	LCC	PAGE
804-15		VFY	FCL		R OUTBD ELEVON ACTR CHAN 4 POSN	V58HU955A1	NOLO				DEG	-1	INHB	MSEQ		
805-15		VFY	FCL		R OUTBD ELEVON ACTR CHAN 4 POSN	V58HU955A1	-0.36				DEG	1.34	INHB	MSEQ		
189-00		CVFY	FCL		MPS ENG 1 P ACTR POSN	V58H110UA1	-1.12				DEG	4.8	INHB	MSEQ		6.9.10-20
808-00		VFY	FCL		MPS ENG 1 P ACTR POSN	V58H110UA1	4.5				DEG	7.5	INHB	MSEQ		
809-00		VFY	FCL		MPS ENG 1 P ACTR POSN	V58H110UA1	-7.5				DEG	-4.5	INHB	MSEQ		
189-01		CVFY	FCL		MPS ENG 1 Y ACTR POSN	V58H110UA1	.98				DEG	-0.62	INHB	MSEQ		6.9.10-20
808-01		VFY	FCL		MPS ENG 1 Y ACTR POSN	V58H110UA1	4.5				DEG	7.5	INHB	MSEQ		
809-01		VFY	FCL		MPS ENG 1 Y ACTR POSN	V58H110UA1	-7.5				DEG	-4.5	INHB	MSEQ		
189-02		CVFY	FCL		MPS ENG 2 P ACTR POSN	V58H120UA1	1.12				DEG	-4.8	INHB	MSEQ		6.9.10-20
808-02		VFY	FCL		MPS ENG 2 P ACTR POSN	V58H120UA1	4.5				DEG	7.5	INHB	MSEQ		
809-02		VFY	FCL		MPS ENG 2 P ACTR POSN	V58H120UA1	-7.5				DEG	-4.5	INHB	MSEQ		
189-03		CVFY	FCL		MPS ENG 2 Y ACTR POSN	V58H120UA1	1.01				DEG	-0.59	INHB	MSEQ		6.9.10-20
808-03		VFY	FCL		MPS ENG 2 Y ACTR POSN	V58H120UA1	4.5				DEG	7.5	INHB	MSEQ		
809-03		VFY	FCL		MPS ENG 2 Y ACTR POSN	V58H120UA1	-7.5				DEG	-4.5	INHB	MSEQ		
189-04		CVFY	FCL		MPS ENG 3 P ACTR POSN	V58H130UA1	-1.12				DEG	4.8	INHB	MSEQ		6.9.10-20
808-04		VFY	FCL		MPS ENG 3 P ACTR POSN	V58H130UA1	4.5				DEG	7.5	INHB	MSEQ		
809-04		VFY	FCL		MPS ENG 3 P ACTR POSN	V58H130UA1	-7.5				DEG	-4.5	INHB	MSEQ		
189-05		CVFY	FCL		MPS ENG 3 Y ACTR POSN	V58H130UA1	1.01				DEG	-0.59	INHB	MSEQ		6.9.10-20
808-05		VFY	FCL		MPS ENG 3 Y ACTR POSN	V58H130UA1	4.5				DEG	7.5	INHB	MSEQ		
809-05		VFY	FCL		MPS ENG 3 Y ACTR POSN	V58H130UA1	-7.5				DEG	-4.5	INHB	MSEQ		
159-00		CVFY	HYD		HYD SYS 1 SUPPLY PRESS B	V58PU15A1	2850				PSIA	3400	INHB	MPS4		6.7.2-3
188-00		CVFY	HYD		HYD SYS 1 SUPPLY PRESS B	V58PU15A1	2850				PSIA	3400	INHB	MPS4		6.7.2-3
159-01		VFY	HYD		HYD SYS 1 SUPPLY PRESS C	V58PU16C1	2800				PSIA	3400	INHB	MPS4		6.7.2-3
188-01		CVFY	HYD		HYD SYS 1 SUPPLY PRESS C	V58PU16C1	2800				PSIA	3400	INHB	MPS4		6.7.2-3
169-00		CVFY	HYD		HYD SYS 1 RVSF FLUID PRESS	V58PU131A1	43				PSIA	120	1 OF 2			6.7.2-10
043-00		CVFY	HYD		HYD SYS 1 RVSF FLUID PRESS	V58PU131A1	60				PSIA	NOHI	1 OF 2			6.7.2-10
151-00		CVFY	HYD		HYD SYS 1 CIRC PUMP PRESS	V58PU137A1	330				PSIA	NOHI		INHB	MAPU	6.7.2-5
043-01		CVFY	HYD		HYD SYS 1 CIRC PUMP PRESS	V58PU137A1	NOLO				PSIA	140	INHB	MSEQ		6.7.2-5
169-01		CVFY	HYD		SYS 1 GN2 ACCUM PRESS	V58PU167A1	1906				PSIA	3233	INHB	MAPU		6.7.2-10
159-02		VFY	HYD		HYD SYS 2 SUPPLY PRESS B	V58PU215A1	2706				PSIA	NOHI	INHB	MSEQ		6.7.2-10
188-02		CVFY	HYD		HYD SYS 2 SUPPLY PRESS B	V58PU215A1	2850				PSIA	3400	INHB	MPS4		6.7.2-3
159-03		VFY	HYD		HYD SYS 2 SUPPLY PRESS B	V58PU215A1	2850				PSIA	3400	INHB	MSEQ		6.7.2-3
188-03		CVFY	HYD		HYD SYS 2 SUPPLY PRESS C	V58PU216C1	2800				PSIA	3400	INHB	MPS4		6.7.2-3
043-02		CVFY	HYD		HYD SYS 2 SUPPLY PRESS C	V58PU216C1	2800				PSIA	3400	INHB	MSEQ		6.7.2-3
169-02		CVFY	HYD		HYD SYS 2 RVSF FLUID PRESS	V58PU231A1	43				PSIA	120	1 OF 2			6.7.2-10
043-07		CVFY	HYD		HYD SYS 2 RVSF FLUID PRESS	V58PU231A1	60				PSIA	NOHI	1 OF 2			6.7.2-10
161-01		CVFY	HYD		HYD SYS 2 CIRC PUMP PRESS	V58PU237A1	330				PSIA	NOHI	INHB	MAPU		6.7.2-5
043-03		CVFY	HYD		HYD SYS 2 CIRC PUMP PRESS	V58PU237A1	NOLO				PSIA	140	INHB	MSEQ		6.7.2-5
169-03		CVFY	HYD		SYS 2 GN2 ACCUM PRESS	V58PU267A1	1906				PSIA	3233	INHB	MAPU		6.7.2-10
159-04		VFY	HYD		HYD SYS 3 SUPPLY PRESS B	V58PU315A1	2850				PSIA	3400	INHB	MSEQ		6.7.2-10









SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE	S
:	:	CD	:	:	:	DESIGNATOR	SINGL	:	:	:	:	:
:	CLOCK	E	:	:	:	:	OR LO	HIGH	UNIT	:	:	F
:	:	:	:	:	:	:	:	:	:	:	:	D
595-00	ST 426		CMD	PVD	L PB VENT 5 CLOSE CMD 1A	V59K34U0XL	OFF					
585-01			CMD	PVD	L PB VENT 5 CLOSE CMD 1B	V59K34U1XL	ON					
595-01			CMD	PVD	L PB VENT 5 CLOSE CMD 1B	V59K34U1XL	OFF					
585-02			CMD	PVD	L PB VENT 5 CLOSE CMD 2A	V59K34U0XL	ON					
595-02			CMD	PVD	L PB VENT 5 CLOSE-CMD 2A	V59K34U0XL	OFF					
585-03			CMD	PVD	L PB VENT 5 CLOSE CMD 2B	V59K34U1XL	ON					
595-03			CMD	PVD	L PB VENT 5 CLOSE CMD 2B	V59K34U1XL	OFF					
576-00			CMD	PVD	L PB VENT 5 OPEN CMD 1A	V59K34U0XL	OFF					
576-01			CMD	PVD	L PB VENT 5 OPEN CMD 1B	V59K34U1XL	OFF					
575-02			CMD	PVD	L PB VENT 5 OPEN CMD 2A	V59K34U0XL	OFF					
576-03			CMD	PVD	L PB VENT 5 OPEN CMD 2B	V59K34U1XL	OFF					
584-04			CMD	PVD	L PB VENT 6 CLOSE CMD 1A	V59K35U0XL	ON					
594-09			CMD	PVD	L PB VENT 6 CLOSE CMD 1A	V59K35U0XL	OFF					
584-05			CMD	PVD	L PB VENT 6 CLOSE CMD 1B	V59K35U1XL	ON					
594-10			CMD	PVD	L PB VENT 6 CLOSE CMD 1B	V59K35U1XL	OFF					
584-06			CMD	PVD	L PB VENT 6 CLOSE CMD 2A	V59K35U0XL	ON					
594-11			CMD	PVD	L PB VENT 6 CLOSE CMD 2A	V59K35U0XL	OFF					
584-07			CMD	PVD	L PB VENT 6 CLOSE CMD 2B	V59K35U1XL	ON					
594-12			CMD	PVD	L PB VENT 6 CLOSE CMD 2B	V59K35U1XL	OFF					
575-00			CMD	PVD	L PB VENT 6 OPEN CMD 1A	V59K35U0XL	OFF					
575-01			CMD	PVD	L PB VENT 6 OPEN CMD 1B	V59K35U1XL	OFF					
575-02			CMD	PVD	L PB VENT 6 OPEN CMD 2A	V59K35U0XL	OFF					
575-03			CMD	PVD	L PB VENT 6 OPEN CMD 2B	V59K35U1XL	OFF					
583-05		K	CMD	CPVD	L PB VENT 6 PURGE 2 CMD 1A	V59K37U0XL	ON					PL
594-01		K	CMD	CPVD	L PB VENT 6 PURGE 2 CMD 1A	V59K37U0XL	OFF					PL
583-06		K	CMD	CPVD	L PB VENT 6 PURGE 2 CMD 1B	V59K37U1XL	ON					PL
594-02		K	CMD	CPVD	L PB VENT 6 PURGE 2 CMD 1B	V59K37U1XL	OFF					PL
583-07		K	CMD	CPVD	L PB VENT 6 PURGE 2 CMD 2A	V59K37U0XL	ON					PL
594-03		K	CMD	CPVD	L PB VENT 6 PURGE 2 CMD 2A	V59K37U0XL	OFF					PL
583-08		K	CMD	CPVD	L PB VENT 6 PURGE 2 CMD 2B	V59K37U1XL	ON					PL
594-04		K	CMD	CPVD	L PB VENT 6 PURGE 2 CMD 2B	V59K37U1XL	OFF					PL
578-00			CMD	PVD	L AFT VENTS 8/9 OPEN CMD 1A	V59K39U0XL	ON					
578-01			CMD	PVD	L AFT VENTS 8/9 OPEN CMD 1A	V59K39U0XL	OFF					
578-02			CMD	PVD	L AFT VENTS 8/9 OPEN CMD 1B	V59K39U1XL	ON					
578-03			CMD	PVD	L AFT VENTS 8/9 OPEN CMD 2A	V59K39U0XL	OFF					
587-00			CMD	PVD	L AFT VENTS 8/9 OPEN CMD 2B	V59K39U1XL	OFF					
597-00			CMD	PVD	L AFT VENTS 8/9 PURGE CMD 1A	V59K39U0XL	ON					
587-01			CMD	PVD	L AFT VENTS 8/9 PURGE CMD 1A	V59K39U0XL	OFF					
597-01			CMD	PVD	L AFT VENTS 8/9 PURGE CMD 1B	V59K39U1XL	ON					
587-02			CMD	PVD	L AFT VENTS 8/9 PURGE CMD 1B	V59K39U1XL	OFF					
597-02			CMD	PVD	L AFT VENTS 8/9 PURGE CMD 2A	V59K39U0XL	ON					
597-02			CMD	PVD	L AFT VENTS 8/9 PURGE CMD 2A	V59K39U0XL	OFF					

DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S9005 - L

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
: SEQ	: TIME	: I	: FUNC	: DISC	: NOMENCLATURE	: FUNCTION	: VALUE	: ELSE	: DURATION	: LCC	: PAGE
: :	: CD	: T	: :	: :	: :	: DESIGNATOR	: SINGL	: :	: :	: :	: :
: :	: CLOCK	: E	: :	: :	: :	: :	: OR LO	: HIGH	: UNIT	: :	: :
: :	: :	: :	: :	: :	: :	: :	: :	: :	: :	: :	: :
: :	: :	: :	: :	: :	: :	: :	: :	: :	: :	: :	: :
: :	: :	: :	: :	: :	: :	: :	: :	: :	: :	: :	: :
587-03	CMD	PVD	L	AFT	VENTS 8/9 PURGE CMD 2B	V59KJ911XL	ON				
597-03	CMD	PVD	L	AFT	VENTS 8/9 PURGE CMD 2B	V59K3911XL	OFF				
577-04	CMD	PVD	R	FWD	VENTS 1/2 OPEN CMD 1A	V59K4J50XL	OFF				
577-05	CMD	PVD	R	FWD	VENTS 1/2 OPEN CMD 1B	V59K4J51XL	OFF				
577-06	CMD	PVD	R	FWD	VENTS 1/2 OPEN CMD 2A	V59K4J60XL	OFF				
577-07	CMD	PVD	R	FWD	VENTS 1/2 OPEN CMD 2B	V59K4J61XL	OFF				
586-04	CMD	PVD	R	FWD	VENTS 1/2 PURGE CMD 1A	V59K4100XL	ON				
596-04	CMD	PVD	R	FWD	VENTS 1/2 PURGE CMD 1A	V59K4100XL	OFF				
586-05	CMD	PVD	R	FWD	VENTS 1/2 PURGE CMD 1B	V59K4101XL	ON				
596-05	CMD	PVD	R	FWD	VENTS 1/2 PURGE CMD 1B	V59K4101XL	OFF				
586-06	CMD	PVD	R	FWD	VENTS 1/2 PURGE CMD 2A	V59K4110XL	ON				
596-06	CMD	PVD	R	FWD	VENTS 1/2 PURGE CMD 2A	V59K4110XL	OFF				
586-07	CMD	PVD	R	FWD	VENTS 1/2 PURGE CMD 2B	V59K4111XL	ON				
596-07	CMD	PVD	R	FWD	VENTS 1/2 PURGE CMD 2B	V59K4111XL	OFF				
582-04	CMD	PVD	R	PB	VENTS 3 CLOSE CMD 1A	V59K4200XL	ON				
593-04	CMD	PVD	R	PB	VENTS 3 CLOSE CMD 1A	V59K4200XL	OFF				
582-05	CMD	PVD	R	PB	VENTS 3 CLOSE CMD 1B	V59K4201XL	ON				
593-05	CMD	PVD	R	PB	VENTS 3 CLOSE CMD 1B	V59K4201XL	OFF				
582-06	CMD	PVD	R	PB	VENTS 3 CLOSE CMD 2A	V59K4210XL	ON				
593-06	CMD	PVD	R	PB	VENTS 3 CLOSE CMD 2A	V59K4210XL	OFF				
582-07	CMD	PVD	R	PB	VENTS 3 CLOSE CMD 2B	V59K4211XL	ON				
593-07	CMD	PVD	R	PB	VENTS 3 CLOSE CMD 2B	V59K4211XL	OFF				
574-04	CMD	PVD	R	PB	VENT 3 OPEN CMD 1A	V59K4250XL	OFF				
574-05	CMD	PVD	R	PB	VENT 3 OPEN CMD 1B	V59K4251XL	OFF				
574-06	CMD	PVD	R	PB	VENT 3 OPEN CMD 2A	V59K4260XL	OFF				
574-07	CMD	PVD	R	PB	VENT 3 OPEN CMD 2B	V59K4261XL	OFF				
580-04	CMD	PVD	R	PB/W	VENTS 4/7 CLOSE CMD 1A	V59K4300XL	ON				
592-04	CMD	PVD	R	PB/W	VENTS 4/7 CLOSE CMD 1A	V59K4300XL	OFF				
580-05	CMD	PVD	R	PB/W	VENTS 4/7 CLOSE CMD 1B	V59K4301XL	ON				
592-05	CMD	PVD	R	PB/W	VENTS 4/7 CLOSE CMD 1B	V59K4301XL	OFF				
580-06	CMD	PVD	R	PB/W	VENTS 4/7 CLOSE CMD 2A	V59K4310XL	ON				
592-06	CMD	PVD	R	PB/W	VENTS 4/7 CLOSE CMD 2A	V59K4310XL	OFF				
580-07	CMD	PVD	R	PB/W	VENTS 4/7 CLOSE CMD 2B	V59K4311XL	ON				
592-07	CMD	PVD	R	PB/W	VENTS 4/7 CLOSE CMD 2B	V59K4311XL	OFF				
573-04	CMD	PVD	R	PB/W	VENTS 4/7 OPEN CMD 1A	V59K4350XL	OFF				
573-05	CMD	PVD	R	PB/W	VENTS 4/7 OPEN CMD 1B	V59K4351XL	OFF				
573-06	CMD	PVD	R	PB/W	VENTS 4/7 OPEN CMD 2A	V59K4360XL	OFF				
573-07	CMD	PVD	R	PB/W	VENTS 4/7 OPEN CMD 2B	V59K4361XL	OFF				
585-04	CMD	PVD	R	PB	VENT 5 CLOSE CMD 1A	V59K4400XL	ON				
595-04	CMD	PVD	R	PB	VENT 5 CLOSE CMD 1A	V59K4400XL	OFF				
585-05	CMD	PVD	R	PB	VENT 5 CLOSE CMD 1B	V59K4401XL	ON				



GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI S9005 - L

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SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
:	:	CD	:	:	:	DESIGNATOR	SINGL	:	:	PAGE	:
:	CLOCK	:	:	:	:	OR LO	HIGH	UNIT	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:

595-05			CMD	PVD	R PB VENT 5	CLOSE CMD 1B	V59K4401XL	OFF			
585-06			CMD	PVD	R PB VENT 5	CLOSE CMD 2A	V59K4410XL	ON			
595-06			CMD	PVD	R PB VENT 5	CLOSE CMD 2A	V59K4410XL	OFF			
585-07			CMD	PVD	R PB VENT 5	CLOSE CMD 2B	V59K4411XL	ON			
595-07			CMD	PVD	R PB VENT 5	CLOSE CMD 2B	V59K4411XL	OFF			
576-04			CMD	PVD	R PB VENT 5	OPEN CMD 1A	V59K4450XL	OFF			
576-05			CMD	PVD	R PB VENT 5	OPEN CMD 1B	V59K4451XL	OFF			
576-06			CMD	PVD	R PB VENT 5	OPEN CMD 2A	V59K4460XL	OFF			
576-07			CMD	PVD	R PB VENT 5	OPEN CMD 2B	V59K4461XL	OFF			
584-08			CMD	PVD	R PB VENT 6	CLOSE CMD 1A	V59K4500XL	ON			
594-13			CMD	PVD	R PB VENT 6	CLOSE CMD 1A	V59K4500XL	OFF			
584-09			CMD	PVD	R PB VENT 6	CLOSE CMD 1B	V59K4501XL	ON			PL
594-14			CMD	PVD	R PB VENT 6	CLOSE CMD 1B	V59K4501XL	OFF			PL
584-10			CMD	PVD	R PB VENT 6	CLOSE CMD 2A	V59K4510XL	ON			PL
594-15			CMD	PVD	R PB VENT 6	CLOSE CMD 2A	V59K4510XL	OFF			PL
584-11			CMD	PVD	R PB VENT 6	CLOSE CMD 2B	V59K4511XL	ON			PL
594-16			CMD	PVD	R PB VENT 6	CLOSE CMD 2B	V59K4511XL	OFF			PL
575-04			CMD	PVD	R PB VENT 6	OPEN CMD 1A	V59K4550XL	OFF			PL
575-05			CMD	PVD	R PB VENT 6	OPEN CMD 1B	V59K4551XL	OFF			PL
575-06			CMD	PVD	R PB VENT 6	OPEN CMD 2A	V59K4560XL	OFF			PL
575-07			CMD	PVD	R PB VENT 6	OPEN CMD 2B	V59K4561XL	OFF			PL
583-09			K	CPVD	R PB VENT 6	PURGE 2 CMD 1A	V59K4700XL	ON			PL
574-05			K	CPVD	R PB VENT 6	PURGE 2 CMD 1A	V59K4700XL	OFF			PL
583-10			K	CPVD	R PB VENT 6	PURGE 2 CMD 1B	V59K4701XL	ON			PL
594-06			K	CPVD	R PB VENT 6	PURGE 2 CMD 1B	V59K4701XL	OFF			PL
583-11			K	CPVD	R PB VENT 6	PURGE 2 CMD 2A	V59K4710XL	ON			PL
594-07			K	CPVD	R PB VENT 6	PURGE 2 CMD 2A	V59K4710XL	OFF			PL
583-12			K	CPVD	R PB VENT 6	PURGE 2 CMD 2B	V59K4711XL	ON			PL
594-08			K	CPVD	R PB VENT 6	PURGE 2 CMD 2B	V59K4711XL	OFF			PL
578-04			CMD	PVD	R AFT VENTS	8/9 OPEN CMD 1A	V59K4850XL	OFF			
578-05			CMD	PVD	R AFT VENTS	8/9 OPEN CMD 1B	V59K4851XL	OFF			
578-06			CMD	PVD	R AFT VENTS	8/9 OPEN CMD 2A	V59K4860XL	OFF			
578-07			CMD	PVD	R AFT VENTS	8/9 OPEN CMD 2B	V59K4861XL	OFF			
597-04			CMD	PVD	R AFT VENTS	8/9 PURGE CMD 1A	V59K4900XL	OFF			
587-05			CMD	PVD	R AFT VENTS	8/9 PURGE CMD 1B	V59K4901XL	ON			
597-05			CMD	PVD	R AFT VENTS	8/9 PURGE CMD 1B	V59K4901XL	OFF			
587-06			CMD	PVD	R AFT VENTS	8/9 PURGE CMD 2A	V59K4910XL	ON			
597-06			CMD	PVD	R AFT VENTS	8/9 PURGE CMD 2A	V59K4910XL	OFF			
587-07			CMD	PVD	R AFT VENTS	8/9 PURGE CMD 2B	V59K4911XL	ON			
597-07			CMD	PVD	R AFT VENTS	8/9 PURGE CMD 2B	V59K4911XL	OFF			

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI 9905 - L

DATE 12-10-85

SEQ	TIME	CD	DISC	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
115-00				V59X5J05X1					
116-01				V59X5015X1					
058-00				V59X3105X1	ON	INHIB M009			
507-00				V59X3105X1	ON	DISPLAY			
058-01				V59X3115X1	ON	INHIB M009			
507-01				V59X3115X1	ON	DISPLAY			
058-04				V59X3205X1	ON	INHIB M009			
581-00				V59X3205X1	OFF	1 OF 4			
608-00				V59X3205X1	ON	DISPLAY			
058-05				V59X5215X1	ON	INHIB M009			
581-01				V59X3215X1	OFF	1 OF 4			
608-01				V59X3215X1	ON	DISPLAY			
058-12				V59X3305X1	ON	INHIB M009			
579-00				V59X3305X1	OFF	1 OF 4			
610-00				V59X3305X1	ON	DISPLAY			
058-13				V59X3315X1	ON	INHIB M009			
579-01				V59X3315X1	OFF	1 OF 4			
610-01				V59X3315X1	ON	DISPLAY			
058-08				V59X3405X1	ON	INHIB M009			
609-00				V59X3405X1	ON	DISPLAY			
058-09				V59X3415X1	ON	INHIB M009			
609-01				V59X3415X1	ON	DISPLAY			
058-16				V59X3505X1	ON	INHIB M009			
106-00				V59X3505X1	ON	DISPLAY			
611-00				V59X3505X1	OFF	1 OF 4			PL
058-17				V59X3515X1	ON	INHIB M009			
106-01				V59X3515X1	ON	DISPLAY			
584-01				V59X3515X1	OFF	1 OF 4			PL
611-01				V59X3515X1	ON	INHIB M009			
583-00				V59X3705X1	OFF	1 OF 4			PL
583-01				V59X3705X1	OFF	1 OF 4			PL
115-02				V59X3805X1	OFF	1 OF 4			PL
116-03				V59X3805X1	ON	3 OF 4			
572-00				V59X3805X1	ON	DELAY	1 SEC		
572-01				V59X3805X1	ON	INHIB M009			
058-20				V59X3905X1	ON	DISPLAY			
612-00				V59X3905X1	ON	INHIB M009			
058-21				V59X3915X1	ON	DISPLAY			
612-01				V59X3915X1	ON	INHIB M009			
116-04				V59X4005X1	ON	DISPLAY			

ST400





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SEQ	TIME	CD	CLOCK	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	DESIGNATOR	SINGL	OR	LO	HIGH	UNIT	ELSE	DURATION	LCC	PAGE	S	S	F	D
013-41				CVFY	ECLS	FCL 1 ACCUMULATOR QUANTITY	V65Q113UA1	23						PCT	LCC-3		6.8.3-4					
013-52				CVFY	ECLS	FCL 2 ACCUMULATOR QUANTITY	V65Q13UA1	23						PCT	LCC-3		6.8.3-4					
013-37				CVFY	ECLS	FCL 1 INTERCHANGER FLOWRATE	V65R11UA1	2150						LBM/HR	2 OF 3		6.8.3-2					
013-38				CVFY	ECLS	FCL 1 PAYLOAD HX FLOWRATE	V65R11US1	190						LBM/HR	2 OF 3		6.8.3-2					
013-39				CVFY	ECLS	FGL 1 GOLDPLATE NETWORK FLOWRATE	V65R11US1	265						LBM/HR	LCC-3		6.8.3-2					
013-48				CVFY	ECLS	FCL 2 INTERCHANGER FLOWRATE	V65R13UA1	2150						LBM/HR	2 OF 3		6.8.3-2					
013-49				CVFY	ECLS	FCL 2 PAYLOAD HX FLOWRATE	V65R13US1	190						LBM/HR	2 OF 3		6.8.3-2					
013-50				CVFY	ECLS	FCL 2 COLDPLATE NETWORK FLOWRATE	V65R13US1	265						LBM/HR	LCC-3		6.8.3-2					
013-42				CVFY	ECLS	NH3 SYS A TANK TEMP	V65T11UA1	-50						DEGF	1 OF 2		6.8.3-6					
013-43				CVFY	ECLS	NH3 SYS B TANK TEMP	V65T118A1	-50						DEGF	LCC-1		6.8.3-6					
013-46				CVFY	ECLS	FCL 1 EVAP OUT TEMP	V65T12UA1	30						DEGF	1 OF 2		6.8.3-9					
013-47				CVFY	ECLS	FCL 2 EVAP OUT TEMP	V65T12UA1	30						DEGF	LCC-3		6.8.3-9					
013-29				CVFY	ECLS	PRI FLASH EVAP H2O ACCUM NORM	V65X175E1	ON							1 OF 2		6.8.2-12					
013-30				CVFY	ECLS	SEC FLASH EVAP H2O ACCUM NORM	V65X175E1	ON							LCC-1		6.8.2-12					
003-00				CVFY	GNS	IMU 1 GOOD	V71X2U21B1	ON							LCC-3		6.9.10-26					
003-25				CVFY	GNS	IMU 1 PLATFORM TEMP READY	V71X2U21B1	ON							LCC-3		6.9.10-26					
003-07				CVFY	GNS	IMU 1 PLATFORM TEMP SAFE	V71X24U4X1	ON							LCC-3		6.9.10-28					
003-26				CVFY	GNS	IMU 1 CAPRI TEMP READY	V71X24U5X1	ON							LCC-3		6.9.10-28					
003-08				CVFY	GNS	IMU 1 CAPRI TEMP SAFE	V71X24U6X1	ON							LCC-3		6.9.10-28					
003-01				CVFY	GNS	IMU 2 GOOD	V71X3U21B1	ON							LCC-3		6.9.10-29					
003-27				CVFY	GNS	IMU 2 PLATFORM TEMP READY	V71X34U4X1	ON							LCC-3		6.9.10-26					
003-13				CVFY	GNS	IMU 2 PLATFORM TEMP SAFE	V71X34U5X1	ON							LCC-3		6.9.10-26					
003-28				CVFY	GNS	IMU 2 CAPRI TEMP READY	V71X34U6X1	ON							LCC-3		6.9.10-28					
003-14				CVFY	GNS	IMU 2 CAPRI TEMP SAFE	V71X34U7X1	ON							LCC-3		6.9.10-28					
003-02				CVFY	GNS	IMU 3 GOOD	V71X4U21B1	ON							LCC-3		6.9.10-26					
003-29				CVFY	GNS	IMU 3 PLATFORM TEMP READY	V71X44U4X1	ON							LCC-3		6.9.10-26					
003-19				CVFY	GNS	IMU 3 PLATFORM TEMP SAFE	V71X44U5X1	ON							LCC-3		6.9.10-28					
003-30				CVFY	GNS	IMU 3 CAPRI TEMP READY	V71X44U6X1	ON							LCC-3		6.9.10-28					
003-20				CVFY	GNS	IMU 3 CAPRI TEMP SAFE	V71X44U7X1	ON							LCC-3		6.9.10-29					
037-00				CVFY	FCL	LEFT RHC ROLL CMD A	V72K1155C1	-6.8						DEG	3 OF 2		6.9.10-2					
037-03				CVFY	FCL	LEFT RHC PITCH CMD A	V72K1156C1	-5.1						DEG	3 OF 2		6.9.10-2					
037-06				CVFY	FCL	LEFT RHC YAW CMD A	V72K1157C1	-2.8						DEG	3 OF 2		6.9.10-2					
037-01				CVFY	FCL	LEFT RHC ROLL CMD B	V72K1170C1	-6.8						DEG	3 OF 2		6.9.10-2					
037-04				CVFY	FCL	LEFT RHC PITCH CMD B	V72K1171C1	-5.1						DEG	3 OF 2		6.9.10-2					
037-07				CVFY	FCL	LEFT RHC YAW CMD B	V72K1172C1	-2.8						DEG	3 OF 2		6.9.10-2					
037-02				CVFY	FCL	LEFT RHC ROLL CMD C	V72K1185C1	-6.8						DEG	INHB M009		6.9.10-2					
037-05				CVFY	FCL	LEFT RHC PITCH CMD C	V72K1186C1	-5.1						DEG	INHB M009		6.9.10-2					
037-08				CVFY	FCL	LEFT RHC YAW CMD C	V72K1187C1	-2.8						DEG	INHB M009		6.9.10-2					
037-09				CVFY	FCL	RIGHT RHC ROLL CMD A	V72K12U5C1	-6.8						DEG	3 OF 2		6.9.10-2					
037-12				CVFY	FCL	RIGHT RHC PITCH CMD A	V72K12U6C1	-5.1						DEG	3 OF 2		6.9.10-2					
037-15				CVFY	FCL	RIGHT RHC YAW CMD A	V72K12U7C1	-2.8						DEG	3 OF 2		6.9.10-2					

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SEQ	TIME	I	FJNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
:	CD	:	:	:	:	DESIGNATOR	SINGL	:	:	PAGE
:	CLOCK	:	:	:	:	:	OR LO	:	:	:
:	:	:	:	:	:	:	UNIT	:	:	:
037-10			CVFY	FCL	RIGHT RHC ROLL CMD B	V72K12ZUC1	-6.8	3 OF 2	DEG	6.9.10-2
037-13			CVFY	FCL	RIGHT RHC PITCH CMD B	V72K12Z1C1	-5.1	3 OF 2	DEG	6.9.10-2
037-16			CVFY	FCL	RIGHT RHC YAW CMD B	V72K12Z2C1	-2.8	3 OF 2	DEG	6.9.10-2
037-11			CVFY	FCL	RIGHT RHC ROLL CMD C	V72K12Z5C1	-6.8	INHB	M009	6.9.10-2
037-14			CVFY	FCL	RIGHT RHC PITCH CMD C	V72K12Z6C1	-5.1	INHB	M009	6.9.10-2
037-17			CVFY	FCL	RIGHT RHC YAW CMD C	V72K12Z7C1	-2.8	INHB	M009	6.9.10-2
038-00			CVFY	FCL	FWD THC POS X OUTPUT A	V72K1315X1	OFF	2 OF 3	DEG	6.9.10-4
038-03			CVFY	FCL	FWD THC NEG X OUTPUT A	V72K1310X1	OFF	2 OF 3	DEG	6.9.10-4
038-06			CVFY	FCL	FWD THC POS Y OUTPUT A	V72K1320X1	OFF	2 OF 3	DEG	6.9.10-4
038-09			CVFY	FCL	FWD THC NEG Y OUTPUT A	V72K1321X1	OFF	2 OF 3	DEG	6.9.10-4
038-12			CVFY	FCL	FWD THC POS Z OUTPUT A	V72K1325X1	OFF	2 OF 3	DEG	6.9.10-4
038-15			CVFY	FCL	FWD THC NEG Z OUTPUT A	V72K1326X1	OFF	2 OF 3	DEG	6.9.10-4
038-01			CVFY	FCL	FWD THC POS X OUTPUT B	V72K1355X1	OFF	2 OF 3	DEG	6.9.10-4
038-04			CVFY	FCL	FWD THC NEG X OUTPUT B	V72K1356X1	OFF	2 OF 3	DEG	6.9.10-4
038-07			CVFY	FCL	FWD THC POS Y OUTPUT B	V72K1340X1	OFF	2 OF 3	DEG	6.9.10-4
038-10			CVFY	FCL	FWD THC NEG Y OUTPUT B	V72K1341X1	OFF	2 OF 3	DEG	6.9.10-4
038-13			CVFY	FCL	FWD THC POS Z OUTPUT B	V72K1345X1	OFF	2 OF 3	DEG	6.9.10-4
038-16			CVFY	FCL	FWD THC NEG Z OUTPUT B	V72K1346X1	OFF	2 OF 3	DEG	6.9.10-4
038-02			CVFY	FCL	FWD THC POS X OUTPUT C	V72K1355X1	OFF	INHB	MSEQ	6.9.10-4
038-05			CVFY	FCL	FWD THC NEG X OUTPUT C	V72K1356X1	OFF	INHB	MSEQ	6.9.10-4
038-08			CVFY	FCL	FWD THC POS Y OUTPUT C	V72K1360X1	OFF	INHB	MSEQ	6.9.10-4
038-11			CVFY	FCL	FWD THC NEG Y OUTPUT C	V72K1361X1	OFF	INHB	MSEQ	6.9.10-4
038-14			CVFY	FCL	FWD THC POS Z OUTPUT C	V72K1365X1	OFF	INHB	MSEQ	6.9.10-4
038-17			CVFY	FCL	FWD THC NEG Z OUTPUT C	V72K1366X1	OFF	INHB	MSEQ	6.9.10-4
054-03			VFY	FCL	LEFT RUDDER PEDAL CMD A	V72K1350C1	3.6FD	INHB	M009	6.9.10-6
054-01			VFY	FCL	LEFT RUDDER PEDAL CMD B	V72K1351C1	3.6FD	INHB	M009	6.9.10-6
054-02			VFY	FCL	LEFT RUDDER PEDAL CMD C	V72K1352C1	3.6FD	INHB	M009	6.9.10-6
054-03			VFY	FCL	RIGHT RUDDER PEDAL CMD A	V72K1340C1	3.6FD	INHB	M009	6.9.10-6
054-04			VFY	FCL	RIGHT RUDDER PEDAL CMD B	V72K1341C1	3.6FD	INHB	M009	6.9.10-6
054-05			VFY	FCL	RIGHT RUDDER PEDAL CMD C	V72K1342C1	3.6FD	INHB	M009	6.9.10-6
295-00			CMD	DPS	AFT CMD DCDR LA01 PWR SPLY 1	V72K7965W	OFF	INHB	M009	6.9.10-6
503-00			CMD	DPS	AFT CMD DCDR LA01 PWR SPLY 1	V72K7965W	ON	INHB	M009	6.9.10-6
601-00		ST430	VFY	DPS	HRS MDM LA1 PF BUS 1	V72K7965WR	ON	DISP		
295-01			CMD	DPS	AFT CMD DCDR LA01 PWR SPLY 2	V72K7966W	OFF			
503-01			CMD	DPS	AFT CMD DCDR LA01 PWR SPLY 2	V72K7966W	ON			

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI S9005 - L

DATE 12-10-85

SEQ	TIME	CD	CLOCK	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE	S
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601-01					VFY	DPS	HRS MDM LA1 PF BUS 2	V72K7969WR ON		DISPLAY				
291-00					CMD	DPS	FWD CMD DCDR LFO1 PWR SPLY 1	V72K7968W OFF		INHB MENG				6.9.10-15
504-00					CMD	DPS	FWD CMD DCDR LFO1 PWR SPLY 1	V72K7968W ON		LCC-3				6.9.3-3
601-02					VFY	DPS	HRS MDM LF1 PF BUS 1	V72K7968WR ON		LCC-4				6.9.3-3
291-01					CMD	DPS	FWD CMD DCDR LFO1 PWR SPLY 2	V72K7969W OFF		LCC-4				6.9.3-3
504-01					CMD	DPS	FWD CMD DCDR LFO1 PWR SPLY 2	V72K7969W ON		LCC-4				6.9.24-12
601-03					VFY	DPS	HRS MDM LF1 PF BUS 2	V72K7969WR ON		LCC-4				6.9.10-35
039-00					CVFY	FCL	FLIGHT CONTROL CHANNEL FAILURE	V72X4550X1 OFF		INHB M009				6.9.10-35
003-21					CVFY	GNS	IMU FAILURE	V72X4560X1 OFF		INHB M009				6.9.10-35
008-00					CVFY	DPS	GPC 1 FAIL	V72X7011E1 OFF		INHB M009				6.9.10-35
008-01					CVFY	DPS	GPC 2 FAIL	V72X7012E1 OFF		INHB M009				6.9.10-35
008-02					CVFY	DPS	GPC 3 FAIL	V72X7013E1 OFF		INHB M009				6.9.10-35
008-03					CVFY	DPS	GPC 4 FAIL	V72X7014E1 OFF		INHB M009				6.9.10-35
008-04					CVFY	DPS	GPC 5 FAIL	V72X7015E1 OFF		INHB M009				6.9.10-35
035-09					CVFY	DPS	LH DDU PWR SUPPLY A GOOD	V75X3J01X1 ON		2 OF 3				6.9.5-2
035-10					CVFY	DPS	LH DDU PWR SUPPLY B GOOD	V74XUJ71X1 ON		2 OF 3				6.9.5-2
035-11					CVFY	DPS	LH DDU PWR SUPPLY C GOOD	V74XUJ81X1 ON		LCC-1				6.9.5-6
035-12					CVFY	DPS	RH DDU PWR SUPPLY A GOOD	V74X4751E1 ON		LCC-3				6.9.5-6
035-13					CVFY	DPS	RH DDU PWR SUPPLY B GOOD	V74X5J52E1 ON		1 OF 2				6.9.5-7
035-14					CVFY	DPS	RH DDU PWR SUPPLY C GOOD	V74X5176E1 ON		LCC-3				6.9.6-5
006-00					CVFY	NAVA	TACAN NO 1 POWER STATUS	V75T2517A1 NOLO	120	3 OF 3				6.9.5-5
006-01					CVFY	NAVA	TACAN NO 2 POWER STATUS	V75T2517A1 NOLO	120	3 OF 3				6.9.5-5
006-02					CVFY	NAVA	TACAN NO 3 POWER STATUS	V75X2121D1 ON		LCC-3				6.9.6-2
011-03					CVFY	COMM	GCIL POWER SUPPLY 1 ON	V75X2122D1 ON		LCC-3				6.9.5-2
011-04					CVFY	COMM	GCIL POWER SUPPLY 2 ON	V75X2123D1 ON		LCC-3				6.9.5-2
011-02					CVFY	COMM	GCIL ACTIVE	V75X2124D1 ON		LCC-3				6.9.5-2
011-01					CVFY	COMM	NSP 1 - FRAME SYNC LOCK	V75X2125D1 ON		LCC-3				6.9.5-2
144-01					VFY	INST	RCDR OPS1 HEADTEMP	V75X2126D1 ON		LCC-3				6.9.5-2
144-04					VFY	INST	RCDR OPS2 HEADTEMP	V75X2127D1 ON		LCC-3				6.9.5-2
012-00					CVFY	INST	PCMMU BSR PWR GOOD	V75X2128D1 ON		LCC-3				6.9.6-2
012-01					CVFY	INST	PCMMU BSR MTU GOOD	V75X2129D1 ON		LCC-3				6.9.5-2
012-02					CVFY	INST	PCMMU BSR PROM PAR GOOD	V75X2130D1 ON		LCC-3				6.9.5-2
012-03					CVFY	INST	PCMMU BSR 128 KBS DNLK GOOD	V75X2131D1 ON		LCC-3				6.9.5-2
012-04					CVFY	INST	PCMMU BSR 64 KBS DNLK GOOD	V75X2132D1 ON		LCC-3				6.9.5-2
012-05					CVFY	INST	PCMMU BSR 128 KBS TLM PAR GOOD	V75X2133D1 ON		LCC-3				6.9.5-2
012-06					CVFY	INST	PCMMU BSR 128 KBPS COUNTERS GOOD	V75X2134D1 ON		LCC-3				6.9.6-2
012-07					CVFY	INST	PCMMU BSR 128 KBPS COUNTERS GOOD	V75X2135D1 ON		LCC-3				6.9.6-2
012-08					CVFY	INST	PCMMU BSR 64 KBS COUNTERS GOOD	V75X2136D1 ON		LCC-3				6.9.6-2
012-09					CVFY	INST	OI RAM PARITY GOOD	V75X2137D1 ON		LCC-3				6.9.5-2
012-10					CVFY	INST	PCMMU BSR PDI RAM GOOD	V75X2138D1 ON		LCC-3				6.9.6-2

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OMI S9005 - L

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	SINGL	VALUE	ELSE	DURATION	LCC	PAGE
:	CD	:	:	:	:	:	:	:	:	:	:	:
:	CLOCK	:	:	:	:	:	OR LO:HIGH	UNIT	:	:	:	:
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012-11		CVFY	INST		PCMMU BSR TOGGLE BUFFER GOOD	V75X215J01	ON		LCC-3			6.9.6-2
012-12		CVFY	INST		PCMMU BSR NO RESPONSE GPC	V75X2154D1	ON		LCC-3			6.9.6-2
144-02		VFY	INST		RCDR OPS 1 TAPE MOTION	V75X2523E1	ON		OR			6.9.6-5
144-00		VFY	INST		RCDR OPS1 BITE	V75X2529E1	ON		3 OF 3			6.9.6-5
144-05		VFY	INST		RCDR OPS 2 TAPE MOTION	V75X2523E1	ON		INHB MAPU			6.9.6-5
144-03		VFY	INST		RCDR OPS2 BITE	V75X2529E1	ON		3 OF 3			6.9.6-5
174-00		CMD	EPDC		GSE PWR MN BUS A OFF CMD	V70K0192W	ON					
177-00		CMD	EPDC		GSE PWR MN BUS A OFF CMD	V70K0192W	OFF					
174-01		CMD	EPDC		GSE PWR MN BUS B OFF CMD	V70K0292W	ON					
177-01		CMD	EPDC		GSE PWR MN BUS B OFF CMD	V70K0292W	OFF					
174-02		CMD	EPDC		GSE PWR MN BUS C OFF CMD	V76K0392W	ON					
177-02		CMD	EPDC		GSE PWR MN BUS C OFF CMD	V76K0392W	OFF					
589-00		CMD	EPDC		FWD LCA 1 FIRE 1 INHIBIT CMD	V70K0301NL	ON					
589-01		CMD	EPDC		FWD LCA 1 FIRE 2 INHIBIT CMD	V70K0302NL	ON					
589-02		CMD	EPDC		FWD LCA 2 FIRE 1 INHIBIT CMD	V70K0303NL	ON					
589-03		CMD	EPDC		FWD LCA 2 FIRE 2 INHIBIT CMD	V70K0304NL	ON					
589-04		CMD	EPDC		FWD LCA 3 FIRE 1 INHIBIT CMD	V70K0305NL	ON					
589-05		CMD	EPDC		FWD LCA 3 FIRE 2 INHIBIT CMD	V70K0306NL	ON					
653-00		ISSU	BR		MEC1 LH RSS SAFE 1 (ISSUE FD)	V70K7508BL	ON					
653-01		ISSU	BR		MEC1 RH RSS SAFE 2 (ISSUE FD)	V70K7509BL	ON					
653-03		ISSU	BR		MEC2 LH RSS SAFE 1 (ISSUE FD)	V70K7608BL	ON					
653-02		ISSU	BR		MEC2 RH RSS SAFE 2 (ISSUE FD)	V70K7609BL	ON					
010-48		CVFY	EPDC		FC1 TO ESS1BC SWITCH ON	V76S0165E1	ON		2 OF 3			6.9.7-11
010-51		CVFY	EPDC		FC2 TO ESS2CA SWITCH ON	V76S0165E1	ON		2 OF 3			6.9.7-11
010-54		CVFY	EPDC		FC3 TO ESS3AB SWITCH ON	V76S0165E1	ON		2 OF 3			6.9.7-11
010-18		CVFY	EPDC		MN BUS A VOLTAGE	V70V0100A1	NOLO	32.0	1 OF 2			6.5.2-2
010-20		CVFY	EPDC		MN BUS B VOLTAGE	V70V0200A1	NOLO	32.0	1 OF 2			6.5.2-2
010-22		CVFY	EPDC		MN BUS C VOLTAGE	V70V0300A1	NOLO	32.0	1 OF 2			6.5.2-2
010-01		CVFY	EPDC		AC BUS 1 PHASE A VOLTS	V70V1500A1	115	120	LCC-3			6.9.7-6
010-03		CVFY	EPDC		AC BUS 1 PHASE B VOLTS	V70V1501A1	115	120	LCC-3			6.9.7-6
010-05		CVFY	EPDC		AC BUS 1 PHASE C VOLTS	V70V1502A1	115	120	LCC-3			6.9.7-6
010-07		CVFY	EPDC		AC BUS 2 PHASE A VOLTS	V70V1600A1	115	120	LCC-3			6.9.7-6
010-09		CVFY	EPDC		AC BUS 2 PHASE B VOLTS	V70V1601A1	115	120	LCC-3			6.9.7-6
010-11		CVFY	EPDC		AC BUS 2 PHASE C VOLTS	V70V1602A1	115	120	LCC-3			6.9.7-6
010-13		CVFY	EPDC		AC BUS 3 PHASE A VOLTS	V70V1700A1	115	120	LCC-3			6.9.7-6
010-15		CVFY	EPDC		AC BUS 3 PHASE B VOLTS	V70V1701A1	115	120	LCC-3			6.9.7-6
010-17		CVFY	EPDC		AC BUS 3 PHASE C VOLTS	V70V1702A1	115	120	LCC-3			6.9.7-6
010-28		CVFY	EPDC		AFT PCA-5 VOLTAGE	V70V3092A1	26.5	32.0	1 OF 2			2.3-5
010-29		CVFY	EPDC		AFT PCA-6 VOLTAGE	V70V3093A1	26.5	32.0	1 OF 2			2.3-5
010-40		CVFY	EPDC		MAIN BUS A CONT BUS AB1/CA1 RPC	V70X0124E1	ON		LCC-3			6.9.7-4
010-32		CVFY	EPDC		MAIN BUS A CONT BUS AB2/CA2 RPC	V70X0125E1	ON		LCC-4			6.9.7-4







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SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
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310-02		VFY			SRB IGN CMD FLG	V9UX6577X1	ON		GTO ST290		
265-00		CVFY	INTG		LAUNCH SEQUENCE ABORT FLAG	V9UX8582X1	OFF		EXIT		CPER 6001
502-02		VFY	INTG		LAUNCH SEQUENCE ABORT FLAG	V9UX8582X1	OFF		GTO NEXT		SEQ
526-00		VFY	INTG		LAUNCH SEQUENCE ABORT FLAG	V9UX8582X1	OFF		GTO ST340		
551-00		VFY	INTG		LAUNCH SEQUENCE ABORT FLAG	V9UX8582X1	ON		GTO ST379		
569-00	ST370	VFY	INTG		LAUNCH SEQUENCE ABORT FLAG	V9UX8582X1	OFF		GTO ST380		
571-07		VFY	INTG		LAUNCH SEQUENCE ABORT FLAG	V9UX8582X1	ON		GTO ST395		
616-00		VFY	INTG		LAUNCH SEQUENCE ABORT FLAG	V9UX8582X1	ON		GTO ST465		
701-54	ST35	VFY	INTG		LAUNCH SEQUENCE ABORT	V9UX8582X1	ON		GTO ST40		
701-10		VFY	EPDC		LH IGN PIC CAP A HOLD	V9UX8585X1	OFF		DISPLAY		
701-12		VFY	EPDC		LH IGN PIC CAP B HOLD	V9UX8584X1	OFF		DISPLAY		
701-11		VFY	EPDC		RH IGN PIC CAP A HOLD	V9UX8585X1	OFF		DISPLAY		
701-13		VFY	EPDC		RH IGN PIC CAP B HOLD	V9UX8586X1	OFF		DISPLAY		
701-8		VFY	SSME		ENG SHUTDOWN VERIFICATION HOLD	V9UX8589X1	OFF		DISPLAY		
701-14		VFY	MPS		MPS LH2 OUT3D FILL VLV HOLD	V9UX8590X1	OFF		DISPLAY		
701-15		VFY	MPS		MPS LOX OUTBD FILL VLV HOLD	V9UX8591X1	OFF		DISPLAY		
701-16		VFY	MPS		MPS LOX ACC RECIRC VLV HOLD	V9UX8592X1	OFF		DISPLAY		
701-46	ST30	VFY	INTG		LPS GO FOR AUTO SEQ START HOLD	V9UX8593X1	OFF		DISPLAY		PL
701-48		VFY	INTG		LPS GO FOR ENGINE START HOLD	V9UX8594X1	OFF		DISPLAY		PL
701-47		VFY	INTG		R/S SEQ SSME GO FOR LAUNCH HOLD	V9UX8595X1	OFF		DISPLAY		
701-18		VFY	MPS		MPS E1 H2 PREVLV OPEN HOLD	V9UX8596X1	OFF		DISPLAY		
701-19		VFY	MPS		MPS E2 H2 PREVLV OPEN HOLD	V9UX8597X1	OFF		DISPLAY		
701-20		VFY	MPS		MPS E3 H2 PREVLV OPEN HOLD	V9UX8598X1	OFF		DISPLAY		
701-17		VFY	MPS		MPS L02 OVBD B/V CLOSE HOLD	V9UX8599X1	OFF		DISPLAY		
045-00		CVFY	INTG		COUNTDOWN HOLD FLAG	V9UX8600X1	OFF		INHB MSRB		CPER 6001
701-22		VFY	SSME		ME1 PAD DATA PATH FAIL HOLD	V9UX8670X1	OFF		DISPLAY		
701-23		VFY	SSME		ME2 PAD DATA PATH FAIL HOLD	V9UX8671X1	OFF		DISPLAY		
701-24		VFY	SSME		ME3 PAD DATA PATH FAIL HOLD	V9UX8672X1	OFF		DISPLAY		
701-25		VFY	SSME		ME1 CONTROL FAIL HOLD	V9UX8679X1	ON		GTO ST10		
701-32	ST10	VFY			ME2 CONTROL FAIL HOLD	V9UX8680X1	ON		GTO ST20		
701-39	ST20	VFY			ME3 CONTROL FAIL HOLD	V9UX8681X1	ON		GTO ST30		
701-09		VFY	DPS		FLT-CRITICAL MDM HOLD/ABORT	V9UX8700X1	ON		DISPLAY		
701-49		VFY	INTG		LPS COUNTDOWN HOLD	V9UX8701X1	OFF		DISPLAY		
701-21		VFY	MPS		MPS VLV POS COMM FAULT HOLD	V9UX8709X1	OFF		DISPLAY		
701-50		VFY	INTG		VENT DOOR POS HOLD	V9UX8770X1	ON		DISPLAY		
701-83		VFY	SSME		UNCOMMANDED ENG SHUTDOWN ABORT	V9UX8771X1	OFF		GTO ST35		
701-84		VFY	SSME		MPS ACT PORT COMM FAULT ABORT	V9UX8772X1	OFF		DISPLAY		
701-85		VFY	SSME		ME-1 LOW CHAMBER PRESS ABORT	V9UX8775X1	OFF		DISPLAY		
701-86		VFY	SSME		ME-2 LOW CHAMBER PRESS ABORT	V9UX8774X1	OFF		DISPLAY		
701-87		VFY	SSME		ME-3 LOW CHAMBER PRESS ABORT	V9UX8775X1	OFF		DISPLAY		
701-88		VFY	SSME		ME-1 ACT PORT FAIL ABORT	V9UX8776X1	OFF		DISPLAY		





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:	:	CD	:	:	:	DESIGNATOR	:	:	:	:	:
:	CLOCK	:	:	:	:	:	OR LO	HIGH	UNIT	:	:
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712-04			VFY	DPS	FSP MSG 1 MINOR ID	V92U7U03CX 48				GTO ST12	
712-06			VFY	DPS	FSP MSG 1 MINOR ID	V92U7U03CX 24				GTO ST14	
712-07		ST14	VFY	DPS	FSP MSG1 MINOR ID	V92U7U03CX 145				GTO ST20	
712-08		ST20	VFY	DPS	FSP MSG2 MAJOR ID	V92U7U16CX 102				GTO ST22	
712-10		ST22	VFY	DPS	FSP MSG2 MAJOR ID	V92U7U16CX 103				GTO ST30	
712-09			VFY	DPS	FSP MSG2 MINOR ID	V92U7U18CX 48				GTO ST22	
712-11			VFY	DPS	FSP MSG2 MINOR ID	V92U7U18CX 24				GTO ST34	
712-12		ST24	VFY	DPS	FSP MSG2 MINOR ID	V92U7U18CX 45				GTO ST30	
712-13		ST30	VFY	DPS	FSP MSG3 MAJOR ID	V92U7U30CX 102				GTO ST32	
712-14		ST32	VFY	DPS	FSP MSG3 MAJOR ID	V92U7U30CX 103				GTO ST40	
712-15			VFY	DPS	FSP MSG3 MINOR ID	V92U7U32CX 48				GTO ST32	
712-16			VFY	DPS	FSP MSG3 MINOR ID	V92U7U32CX 24				GTO ST34	
712-17		ST34	VFY	DPS	FSP MSG3 MINOR ID	V92U7U32CX 45				GTO ST40	
712-18		ST40	VFY	DPS	FSP MSG4 MAJOR ID	V92U7U45CX 102				GTO ST42	
712-19		ST42	VFY	DPS	FSP MSG4 MAJOR ID	V92U7U45CX 103				GTO ST50	
712-20			VFY	DPS	FSP MSG4 MINOR ID	V92U7U47CX 48				GTO ST42	
712-21			VFY	DPS	FSP MSG4 MINOR ID	V92U7U47CX 24				GTO ST54	
712-22		ST44	VFY	DPS	FSP MSG4 MINOR ID	V92U7U47CX 45				GTO ST50	
712-23		ST50	VFY	DPS	FSP MSG5 MAJOR ID	V92U7U60CX 102				GTO ST52	
712-25		ST52	VFY	DPS	FSP MSG5 MAJOR ID	V92U7U60CX 103				GTO ST60	
712-24			VFY	DPS	FSP MSG5 MINOR ID	V92U7U62CX 48				GTO ST52	
712-26			VFY	DPS	FSP MSG5 MINOR ID	V92U7U62CX 24				GTO ST54	
712-27		ST54	VFY	DPS	FSP MSG5 MINOR ID	V92U7U62CX 45				GTO ST60	
008-65			CVFY	DPS	DEU #1 BITE STATUS PRESENT B14	V92X6722XX OFF				LCC-3	
008-67			CVFY	DPS	DEU #2 BITE STATUS PRESENT B14	V92X6781XX OFF				LCC-3	
008-76			CVFY	DPS	GPC1 MMU1 IPL SELECT	V92X7366XX OFF				2 OF 4	6.9.3-11
008-80			CVFY	DPS	GPC1 MMU2 IPL SELECT	V92X7367XX OFF				2 OF 4	6.9.3-11
008-68			CVFY	DPS	GPC1 MMU1 READY	V92X7368XX ON				3 OF 4	6.9.3-10
008-72			CVFY	DPS	GPC1 MMU2 READY	V92X7369XX ON				3 OF 4	6.9.3-10
008-77			CVFY	DPS	GPC2 MMJ1 IPL SELECT	V92X7426XX OFF				2 OF 4	6.9.3-11
008-81			CVFY	DPS	GPC2 MMJ2 IPL SELECT	V92X7427XX OFF				2 OF 4	6.9.3-11
008-69			CVFY	DPS	GPC2 MMJ1 READY	V92X7428XX ON				3 OF 4	6.9.3-10
008-73			CVFY	DPS	GPC2 MMJ2 READY	V92X7429XX ON				3 OF 4	6.9.3-10
008-78			CVFY	DPS	GPC3 MMJ1 IPL SELECT	V92X7486XX OFF				2 OF 4	6.9.3-11
008-82			CVFY	DPS	GPC3 MMJ2 IPL SELECT	V92X7487XX OFF				2 OF 4	6.9.3-11
008-70			CVFY	DPS	GPC3 MMU1 READY	V92X7488XX ON				3 OF 4	6.9.3-10
008-74			CVFY	DPS	GPC3 MMU2 READY	V92X7546XX OFF				3 OF 4	6.9.3-10
008-79			CVFY	DPS	GPC4 MMU1 IPL SELECT	V92X7547XX OFF				LCC-3	
008-83			CVFY	DPS	GPC4 MMJ2 IPL SELECT	V92X7548XX OFF				LCC-3	
008-71			CVFY	DPS	GPC4 MMU1 READY	V92X7548XX ON				LCC-3	
008-75			CVFY	DPS	GPC4 MMJ2 READY	V92X7549XX ON				LCC-3	

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SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	ST
:	CD	T	:	:	:	DESIGNATOR	SINGL	:	:	:	:
:	CLOCK	E	:	:	:	OR	LO:HIGH	UNIT	:	:	:
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036-09			CVFY	GNS	LH SRB COMP PITCH RATE 1	VY5R4181C1	-0.45	+0.45	DEG/S	INH3	MSEQ	6.9.10-45
036-10			CVFY	GNS	LH SRB COMP PITCH RATE 2	VY5R4182C1	-0.45	+0.45	DEG/S	INH3	MSEQ	6.9.10-45
036-11			CVFY	GNS	LH SRB COMP PITCH RATE 3	VY5R4183C1	-0.45	+0.45	DEG/S	INH3	MSEQ	6.9.10-45
036-12			CVFY	GNS	LH SRB COMP YAW RATE 1	VY5R4191C1	-0.45	+0.45	DEG/S	INH3	MSEQ	6.9.10-45
036-13			CVFY	GNS	LH SRB COMP YAW RATE 2	VY5R4192C1	-0.45	+0.45	DEG/S	INH3	MSEQ	6.9.10-45
036-14			CVFY	GNS	LH SRB COMP YAW RATE 3	VY5R4193C1	-0.45	+0.45	DEG/S	INH3	MSEQ	6.9.10-45
036-15			CVFY	GNS	RH SRB COMP PITCH RATE 1	VY5R4211C1	-0.45	+0.45	DEG/S	INH3	MSEQ	6.9.10-45
036-16			CVFY	GNS	RH SRB COMP PITCH RATE 2	VY5R4212C1	-0.45	+0.45	DEG/S	INH3	MSEQ	6.9.10-45
036-17			CVFY	GNS	RH SRB COMP PITCH RATE 3	VY5R4213C1	-0.45	+0.45	DEG/S	INH3	MSEQ	6.9.10-45
036-18			CVFY	GNS	RH SRB COMP YAW RATE 1	VY5R4221C1	-0.45	+0.45	DEG/S	INH3	MSEQ	6.9.10-45
036-19			CVFY	GNS	RH SRB COMP YAW RATE 2	VY5R4222C1	-0.45	+0.45	DEG/S	INH3	MSEQ	6.9.10-45
036-20			CVFY	GNS	RH SRB COMP YAW RATE 3	VY5R4223C1	-0.45	+0.45	DEG/S	INH3	MSEQ	6.9.10-45
023-03			VFY	GNS	PREFLIGHT ALIGN COMPLETE	VY5X0010X1	ON			WAIT		
023-22			CVFY	GNS	IMU 1 WORD 13 ECHO FAIL	VY5X0030X1	OFF			LCC-3		6.9.10-32
003-31			CVFY	GNS	IMU 1 WORD 14 ECHO FAIL	VY5X0031X1	OFF			LCC-3		6.9.10-32
003-03			CVFY	GNS	IMU 1 REDUNDANT RATE FAIL	VY5X0033X1	OFF			LCC-3		6.9.10-32
003-04			CVFY	GNS	IMU 1 INNER RESOLVER NULL FAIL	VY5X0034X1	OFF			LCC-3		6.9.10-32
003-05			CVFY	GNS	IMU 1 VELOCITY LIMIT FAIL	VY5X0035X1	OFF			LCC-3		6.9.10-32
003-06			CVFY	GNS	IMU 1 RESOLVER LIMIT FAIL	VY5X0037X1	OFF			LCC-3		6.9.10-32
003-23			CVFY	GNS	IMU 2 WORD 13 ECHO FAIL	VY5X1030X1	OFF			LCC-3		6.9.10-32
003-32			CVFY	GNS	IMU 2 WORD 14 ECHO FAIL	VY5X1031X1	OFF			LCC-3		6.9.10-32
003-09			CVFY	GNS	IMU 2 REDUNDANT RATE FAIL	VY5X1033X1	OFF			LCC-3		6.9.10-32
003-10			CVFY	GNS	IMU 2 INNER RESOLVER NULL FAIL	VY5X1034X1	OFF			LCC-3		6.9.10-32
003-11			CVFY	GNS	IMU 2 VELOCITY LIMIT FAIL	VY5X1035X1	OFF			LCC-3		6.9.10-32
003-12			CVFY	GNS	IMU 2 RESOLVER LIMIT FAIL	VY5X1037X1	OFF			LCC-3		6.9.10-32
003-24			CVFY	GNS	IMU 3 WORD 13 ECHO FAIL	VY5X2030X1	OFF			LCC-3		6.9.10-32
003-33			CVFY	GNS	IMU 3 WORD 14 ECHO FAIL	VY5X2031X1	OFF			LCC-3		6.9.10-32
003-15			CVFY	GNS	IMU 3 REDUNDANT RATE FAIL	VY5X2033X1	OFF			LCC-3		6.9.10-32
003-16			CVFY	GNS	IMU 3 INNER RESOLVER NULL FAIL	VY5X2034X1	OFF			LCC-3		6.9.10-32
003-17			CVFY	GNS	IMU 3 VELOCITY LIMIT FAIL	VY5X2035X1	OFF			LCC-3		6.9.10-32
003-18			CVFY	GNS	IMU 3 RESOLVER LIMIT FAIL	VY5X2037X1	OFF			LCC-3		6.9.10-32
035-24			CVFY	DPS	MTU ACCUMULATOR SOURCE	VY8J0615C1	8001	8010		CPER	G005 TIL MSEQ	6.9.10-32
705-01			VFY	DPS	MTU ACCUMULATOR SOURCE	VY8J0515C1	8001	8011		INH3	MSEQ END G005	6.9.10-32
705-02			CVFY	DPS	MTU ACCUMULATOR SOURCE	VY8J0515C1	3001	8011		CPER	G005 TIL MSEQ	6.9.10-32
712-28			VFY	DPS	GPC ERROR LOG1-ERROR CODE BFS	VY8J2509C1				NOTE	A	6.9.24-6
712-29			VFY	DPS	GPC ERROR LOG2-ERROR CODE BFS	VY8J2525C1				NOTE	A	6.9.24-6
712-30			VFY	DPS	GPC ERROR LOG3-ERROR CODE BFS	VY8J2541C1				NOTE	A	6.9.24-6
712-31			VFY	DPS	GPC ERROR LOG4-ERROR CODE BFS	VY8J2557C1				NOTE	A	6.9.24-6
712-32			VFY	DPS	GPC ERROR LOG5-ERROR CODE BFS	VY8J2573C1				NOTE	A	6.9.24-6
035-05			CVFY	DPS	BFS TERM B	VY8X0594X1	ON			INH3	MENG	6.9.24-2
035-06			CVFY	DPS	BFS ENGAGE 1	VY8X0604X1	OFF			INH3	MENG	6.9.24-3







GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI S9005 - L

DATE 12-10-85

SEQ	TIME	I	FJNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
:	:	:	:	:	:	:	:	:	:	:	:
:	CD	T	:	:	:	DESIGNATOR	SINGL	:	:	:	:
:	CLOCK	E	:	:	:	:	OR LO	HIGH	UNIT	:	:
:	:	:	S	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
035-07			CVFY	DPS	BFS ENGAGE 2	V98XU05X1	OFF			INHB MENG	6.9.24-3
035-08			CVFY	DPS	BFS ENGAGE 3	V98XU06X1	OFF			INHB MENG	6.9.24-3
035-25			CVFY	DPS	PAYLOAD 1B PF1	V98XU061X1	OFF			INHB MSEQ	6.9.24-13
035-26			CVFY	DPS	PAYLOAD 1B PF2	V98XU05X1	OFF			INHB MSEQ	6.9.24-13
035-01			CVFY	DPS	BFS TRKG F/C 1	V98XZ75X1	ON			INHB MENG	6.9.24-9
035-02			CVFY	DPS	BFS TRKG F/C 2	V98XZ75X1	ON			INHB MENG	6.9.24-9
035-03			CVFY	DPS	BFS TRKG F/C 3	V98XZ75X1	ON			INHB MENG	6.9.24-9
035-04			CVFY	DPS	BFS TRKG F/C 4	V98XZ75X1	ON			INHB MENG	6.9.24-9
233-00			CVFY	DPS	ASSX ASC DAP 1ST CYCLE	V98XZ75X1	ON			INHB MENG	6.9.24-9
701-52			VFY	INTG	LPS ORBITER VENT DOORS OVRD WORD	V98XZ75X1	ON			INHB MENG	6.9.24-9
014-50			V	CVFY	ECPT603 ORB FWD I/F PRESS	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
014-54			V	CVFY	ECPT605 ORB AFT I/F PRESS	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
014-51			V	CVFY	ECPT604 ORB FWD I/F PRESS	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
014-55			V	CVFY	ECPT606 ORB AFT I/F PRESS	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
014-52			V	CVFY	ECPT503 ORB PLB I/F PRESS	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
014-53			V	CVFY	ECPT504 ORB PLB I/F PRESS	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
126-50			V	CMD	B LAUNCH POS RETR ENBL	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
550-04			V	CMD	B DR LAUNCH POS RETR ENBLE	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
133-02			V	CMD	B LAUNCH POS RETR	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
550-02			V	CMD	B DR LAUNCH POS RETR	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
550-06			V	CMD	B EMERGENCY EXTEND ENABLE CMD	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
633-06			V	CMD	B EMERGENCY EXTEND ENABLE CMD	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
550-10			V	CMD	B EMERGENCY EXTEND CMD	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
633-04			V	CMD	B EMERGENCY EXTEND CMD	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
126-51			V	CMD	A LAUNCH POS RETR ENBLE	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
550-05			V	CMD	A DR LAUNCH POS RETR ENBLE	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
133-03			V	CMD	A LAUNCH POS RETR	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
550-03			V	CMD	A DR LAUNCH POS RETR	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
550-07			V	CMD	A EMERGENCY EXTEND ENABLE CMD	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
633-07			V	CMD	A EMERGENCY EXTEND ENABLE CMD	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
550-11			V	CMD	A EMERGENCY EXTEND CMD	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
633-05			V	CMD	A EMERGENCY EXTEND CMD	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
120-00			V	CMD	A REMOTE POWER CONTROL	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
296-00			V	CMD	A REMOTE POWER CONTROL	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
550-00			V	CMD	A REMOTE POWER CONTROL	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
633-10			V	CMD	A REMOTE POWER CONTROL	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
120-01			V	CMD	A REMOTE POWER CONTROL	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
296-01			V	CMD	B REMOTE POWER CONTROL	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
550-01			V	CMD	B REMOTE POWER CONTROL	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
633-11			V	CMD	B REMOTE POWER CONTROL	V98XZ75X1	ON			INHB MSEQ	6.9.24-10
136-53			V	VFY	CCAA POSITION INDICATOR	V98XZ75X1	ON			INHB MSEQ	6.9.24-10

SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	NOHI	FT	ELSE	DURATION	LCC	IS
:	:	:	:	:	:	:	:	:	:	:	:	:
:	CD	:	:	:	DESIGNATOR	SINGL	:	:	:	:	PAGE	:
:	LOCK	E	:	:	OR	LO	HIGH	UNIT	:	:	:	F
:	:	:	:	:	:	:	:	:	:	:	:	D
633-01	V	VFY	ARMS	CCAA POSITION INDICATOR	XEGPVU0YA	63.5	NOHI	FT	1 OF 3			
060-50	V	VFY	ARMS	CCAA PRI DC POWER BUS ON IND	XEGXVA03E	ON			1 OF 2			
060-51	V	VFY	ARMS	CCAA SEC DC POWER BUS ON IND	XEGXVA13E	ON			INHB M009			
060-52	V	VFY	ARMS	CCAA PRI DC POWER ON IND	XEGXVA23E	ON			1 OF 2			
060-53	V	VFY	ARMS	CCAA SEC DC POWER ON IND	XEGXVA33E	ON			INHB M009			
133-00	V	VFY	ARMS	B LAUNCH POS RETR ENABLE IND	XEGXVJ03E	ON			1 OF 2			
136-51	V	VFY	ARMS	CCAA B LAUNCH POSN LIMIT STOP IND	XEGXVB13E	ON			1 OF 3			
550-08	V	VFY	ARMS	B EMERGENCY EXTEND ENABLE IND	XEGXVB23E	ON			1 OF 2			
633-08	V	VFY	ARMS	B EMERGENCY EXTEND ENABLE IND	XEGXVB23E	OFF			DISPLAY			
633-02	V	VFY	ARMS	B FORWARD STOP LIMIT IND	XEGXVB33E	ON			1 OF 3			
122-00	V	VFY	ARMS	A REMOTE CONTROL IND PRI	XEGXVB53E	ON			1 OF 2			
133-01	V	VFY	ARMS	A LAUNCH POS RETR ENABLE IND	XEGXVL03E	ON			GT0 ST200			
136-52	V	VFY	ARMS	CCAA A LAUNCH POSN LIMIT STOP IND	XEGXVC13E	ON			1 OF 3			
550-09	V	VFY	ARMS	A EMERGENCY EXTEND ENABLE IND	XEGXVC23E	ON			DISPLAY			
633-09	V	VFY	ARMS	A EMERGENCY EXTEND ENABLE IND	XEGXVC23E	ON			DISPLAY			
633-03	V	VFY	ARMS	A EMERGENCY EXTEND ENABLE IND	XEGXVC23E	OFF			DISPLAY			
122-01	V	VFY	ARMS	A FORWARD STOP LIMIT IND	XEGXVC43E	ON			GT0 ST490			
313-51	V	CMD	WATR	B REMOTE CONTROL IND SEC	XEGXVG53E	ON			INHB MOAA			
313-50	V	CMD	WATR	AT WASHDOWN INITIATE CMD	XWDKVJ41E	ON						
270-01	V	CMD	WATR	MST WASHDOWN INITIATE CMD	XWDKVU31E	ON						
519-50	V	CMD	WATR	LH2 AREA WASHDOWN INITIATE CMD	XWDKVU61E	ON						
270-02	V	CMD	WATR	LH2 AREA WASHDOWN INITIATE CMD	XWDKVU71E	ON						
519-51	V	CMD	WATR	L02 AREA WASHDOWN INITIATE CMD	XWDKVJ71E	OFF						
313-53	V	CMD	WATR	CCAA VALVES OPEN COMMAND	XWDKVA71E	ON						
232-50	V	CMD	WATR	SSW PRI MAIN VLVS CLOSE CMD	XWDKVB2UE	OFF						
271-50	V	CMD	WATR	SSW PRI MAIN VLVS OPEN CMD	XWDKVB21E	ON						
320-00	V	CMD	WATR	SSW PRI MAIN VALVE OPEN CMD	XWDKVB21E	OFF						
598-00	V	CMD	WATR	SSW PRI MAIN VALVE OPEN CMD	XWDKVB21E	OFF						
232-54	V	CMD	WATR	SSW PRI MAIN VLVS OPEN ENABLE	XWDKVLU1E	ON						
320-02	V	CMD	WATR	SSW PRI MAIN VALVE OPEN ENBLE CMD	XWDKVLU1E	OFF						
598-02	V	CMD	WATR	SSW PRI MAIN VALVE OPEN ENABLE CMD	XWDKVLU1E	OFF						
232-55	V	CMD	WATR	SSW SEC MAIN VLVS OPEN ENABLE	XWDKVL11E	ON						
320-03	V	CMD	WATR	SSW SEC MAIN VALVE OPEN ENBLE CMD	XWDKVCL1E	OFF						
598-03	V	CMD	WATR	SSW SEC MAIN VALVE OPEN ENABLE CMD	XWDKVCL1E	OFF						
271-51	V	CMD	WATR	SSW SEC MAIN VLVS OPEN CMD	XWDKVCL21E	ON						
320-01	V	CMD	WATR	SSW SEC MAIN VALVE OPEN CMD	XWDKVCL21E	OFF						
598-01	V	CMD	WATR	SSW SEC MAIN VALVE OPEN CMD	XWDKVCL21E	OFF						
232-52	V	CMD	WATR	SSW PRI MAIN VLVS CLOSE ENABLE CMD	XWDKVD21E	OFF						
238-53	V	CMD	WATR	ATWD ARM AREA B	XWDKVD51E	ON						
270-00	V	CMD	WATR	ATWD ET ARM OPEN CMD	XWDKVD61E	ON						
238-52	V	CMD	WATR	ATWD ARM AREA A	XWDKVL71E	ON						

DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI S9005 - L :

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE	S
232-51	V	CMD	WATR	SSW	SEC MAIN VLV5 CLOSE CMD	XWDKVF60E	OFF					
232-53	V	CMD	WATR	SSW	SEC MAIN VLV5 CLOSE ENABLE CMD	XWDKVF60E	OFF					
005-52	V	CVFY	WATR	SSW	PRI GN2 SUPPLY PRESS	XWDPVF24A	1500	PSIG	1 OF 2			
005-53	V	CVFY	WATR	SSW	SEC GN2 SUPPLY PRESS	XWDPVF54A	1500	PSIG	LCC-3			
005-54	V	CVFY	WATR	SSW	PRI GN2 VLV CLOSING PRESS	XWDPVF44A	1500	PSIG	1 OF 2			
250-01	V	VFY	WATR	SSW	PRI GN2 VLV CLOSING PRESS	XWDPVF44A	NOL0	PSIG	1 OF 2			
005-55	V	CVFY	WATR	SSW	SEC GN2 VLV CLOSING PRESS	XWDPVF54A	1500	PSIG	LCC-2			
250-02	V	VFY	WATR	SSW	SEC GN2 VLV CLOSING PRESS	XWDPVF54A	NOL0	PSIG	1 OF 2			
005-50	V	CVFY	WATR	SSW	PRI WATER LEVEL IND	XWQVVFU4A	305.1	FT	INHB MSEQ			
005-51	V	CVFY	WATR	SSW	SEC WATER LEVEL IND	XWQVVF14A	305.1	FT	1 OF 2			
059-02	V	VFY	WATR	SSW	PRI DC POWER BUS ON IND	XWDXV050E	ON		LCC-1			
059-03	V	VFY	WATR	SSW	SEC DC POWER BUS ON IND	XWDXV315E	ON		1 OF 2			
286-50	V	VFY	WATR	PRI MAIN VLV 1		XWDXV315E	ON		INHB M009			
286-52	V	VFY	WATR	PRI MAIN VLV 2		XWDXV23E	ON		1 OF 2			
286-54	V	VFY	WATR	PRI MAIN VLV 3		XWDXV033E	ON		1 OF 2			
286-56	V	VFY	WATR	PRI MAIN VLV 4		XWDXV043E	ON		1 OF 2			
286-58	V	VFY	WATR	PRI MAIN VLV 5		XWDXV053E	ON		1 OF 2			
059-00	V	VFY	WATR	SSW	PRI DC POWER ON IND	XWDXV075E	ON		1 OF 2			
059-01	V	VFY	WATR	SSW	SEC DC POWER ON IND	XWDXV385E	ON		1 OF 2			
238-50	V	VFY	WATR	SSW	PRI MAIN V OPEN ENABLE IND	XWDXVLCU5E	ON		1 OF 2			
238-51	V	VFY	WATR	SSW	SEC MAIN V OPEN ENABLE IND	XWDXV13E	ON		1 OF 2			
286-51	V	VFY	WATR	SEC MAIN VLV 1		XWDXVLCU5E	ON		INHB M009			
286-53	V	VFY	WATR	SEC MAIN VLV 2		XWDXVLCU5E	ON		INHB MSEQ			
286-55	V	VFY	WATR	SEC MAIN VLV 3		XWDXV23E	ON		1 OF 2			
286-57	V	VFY	WATR	SEC MAIN VLV 4		XWDXV043E	ON		1 OF 2			
286-59	V	VFY	WATR	SEC MAIN VLV 5		XWDXV053E	ON		1 OF 2			
313-52	V	CMD	WATR	CCAA/EGRESS	ROUTE OPEN B CMD	XWQVV051E	ON		1 OF 2			















SEQ	TIME	CD	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION
:S	:I	:T	: :	: :	: :	: :	: :	: :
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\$ GROUND LAUNCH SEQUENCER OPERATIONS BEGIN WITH GLS INITIALIZATION, INITIALIZATION TIME IS PER THE CONTROLLING OMI. THIS IS GENERALLY T-2 HOURS. \$

016-00	CVFY APU	APU1 GAS GENERATOR BED TEMP	V46T0122A1	204	436	DEGF	1 OF 2	6.6-13
016-01	CVFY APU	APU1 INJECT TUBE TEMP	V46T0174A1	204	436	DEGF	LCC-2	6.6-13
016-02	CVFY APU	APU2 GAS GENERATOR BED TEMP	V46T0222A1	204	436	DEGF	1 OF 2	6.6-13
016-03	CVFY APU	APU2 INJECT TUBE TEMP	V46T0274A1	204	436	DEGF	LCC-2	6.6-13
016-04	CVFY APU	APU3 GAS GENERATOR BED TEMP	V46T0322A1	204	436	DEGF	1 OF 2	6.6-13
016-05	CVFY APU	APU3 INJECT TUBE TEMP	V46T0374A1	204	436	DEGF	LCC-2	6.6-13
016-06	CVFY APU	APU 1 FU PMP DRN LN P-1	V46P0190A1	NOL0	25	PSIA	1 OF 2	6.6-32
016-07	CVFY APU	APU 1 FU PMP DRN LN P-2	V46P0191A1	NOL0	25	PSIA	LCC-3	6.6-32
016-08	CVFY APU	APU 2 FU PMP DRN LN P-1	V46P0290A1	NOL0	25	PSIA	1 OF 2	6.6-32
016-09	CVFY APU	APU 2 FU PMP DRN LN P-2	V46P0291A1	NOL0	25	PSIA	LCC-3	6.6-32
016-10	CVFY APU	APU 3 FU PMP DRN LN P-1	V46P0390A1	NOL0	25	PSIA	1 OF 2	6.6-32
016-11	CVFY APU	APU 3 FU PMP DRN LN P-2	V46P0391A1	NOL0	25	PSIA	LCC-3	6.6-32
016-12	CVFY APU	APU 1 GN2 BOTTLE PRESS	V46P0152A1	115	NOHI	PSIA	LCC-3	6.6-25
016-13	CVFY APU	APU 2 GN2 BOTTLE PRESS	V46P0252A1	115	NOHI	PSIA	LCC-3	6.6-25
016-14	CVFY APU	APU 3 GN2 BOTTLE PRESS	V46P0352A1	115	NOHI	PSIA	LCC-3	6.6-25
044-01	CVFY APU	APU 1 GRBX LUBE OIL OUTPRESS	V46P0153A1	NOL0	35	PSIA	INHB MAPU	6.6-22
044-03	CVFY APU	APU 2 GRBX LUBE OIL OUTPRESS	V46P0253A1	NOL0	35	PSIA	INHB MAPU	6.6-22
044-05	CVFY APU	APU 3 GRBX LUBE OIL OUTPRESS	V46P0353A1	NOL0	35	PSIA	INHB MAPU	6.6-22
139-00	CVFY APU	APU-1 TURBINE EXHAUST TEMP NO. 1	V46T0142A1	NOL0	1260	DEGF	1 OF 2	6.6-18
139-01	CVFY APU	APU-1 TURBINE EXHAUST TEMP NO. 2	V46T0140A1	NOL0	1260	DEGF	INHB PSEQ	6.6-18
139-02	CVFY APU	APU-2 TURBINE EXHAUST TEMP NO. 1	V46T0242A1	NOL0	1260	DEGF	1 OF 2	6.6-18
139-03	CVFY APU	APU-2 TURBINE EXHAUST TEMP NO. 2	V46T0240A1	NOL0	1260	DEGF	INHB PSEQ	6.6-18
139-04	CVFY APU	APU-3 TURBINE EXHAUST TEMP NO. 1	V46T0342A1	NOL0	1260	DEGF	1 OF 2	6.6-18
139-05	CVFY APU	APU-3 TURBINE EXHAUST TEMP NO. 2	V46T0340A1	NOL0	1260	DEGF	INHB MSEQ	6.6-18
139-06	CVFY APU	APU-1 GEARBOX LUBE OIL OUT TEMP	V46T0154A1	NOL0	310	DEGF	1 OF 2	6.6-20
139-07	CVFY APU	APU-1 GEARBOX LUBE OIL RETURN TE	V46T0150A1	NOL0	280	DEGF	INHB MSEQ	6.6-20
139-08	CVFY APU	APU-2 GEARBOX LUBE OIL OUT TEMP	V46T0254A1	NOL0	310	DEGF	1 OF 2	6.6-20
139-09	CVFY APU	APU-2 GEARBOX LUBE OIL RETURN TE	V46T0250A1	NOL0	280	DEGF	INHB PSEQ	6.6-20
139-10	CVFY APU	APU-3 GEARBOX LUBE OIL OUT TEMP	V46T0354A1	NOL0	310	DEGF	1 OF 2	6.6-20
139-11	CVFY APU	APU-3 GEARBOX LUBE OIL RETURN TE	V46T0350A1	NOL0	280	DEGF	INHB MSEQ	6.6-20
162-00	CVFY APU	APU 1 GRBX GN2 PRESS	V46P0151A1	5.5	29.5	PSIA	INHB MSEQ	6.6-22
162-01	CVFY APU	APU 1 GRBX LUBE OIL OUTPRESS	V46P0153A1	NOL0	140	PSIA	INHB MSEQ	6.6-22
162-02	CVFY APU	APU 2 GRBX GN2 PRESS	V46P0251A1	5.5	29.5	PSIA	INHB PSEQ	6.6-22
162-03	CVFY APU	APU 2 GRBX LUBE OIL OUTPRESS	V46P0253A1	NOL0	140	PSIA	INHB MSEQ	6.6-22
162-04	CVFY APU	APU 3 GRBX GN2 PRESS	V46P0351A1	5.5	29.5	PSIA	INHB MSEQ	6.6-22
162-05	CVFY APU	APU 3 GRBX LUBE OIL OUTPRESS	V46P0353A1	NOL0	140	PSIA	INHB MSEQ	6.6-22

DATE 12-10-85

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

UMI 89005 - L

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	VALUE	FUNCTION	ELSE	DURATION	LCC	S
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170-02			CVFY	APU	APU 1 GRBX BEARING TEMP NO 1	335	DEGF	1 OF 2		6.6-24A	
170-03			CVFY	APU	APU 1 GRBX BEARING TEMP NO 2	335	DEGF	INHBB MSEQ		6.6-24A	
170-04			CVFY	APU	APU 2 GRBX BEARING TEMP NO 1	335	DEGF	1 OF 2		6.6-24A	
170-05			CVFY	APU	APU 2 GRBX BEARING TEMP NO 2	335	DEGF	INHBB MSEQ		6.6-24A	
170-06			CVFY	APU	APU 3 GRBX BEARING TEMP NO 1	335	DEGF	1 OF 2		6.6-24A	
170-07			CVFY	APU	APU 3 GRBX BEARING TEMP NO 2	335	DEGF	INHBB MSEQ		6.6-24A	
060-00		K	VFY	ARMS	ACCUM LEVEL SW NO. 1 LOW		GSAX7641E	OFF	2 OF 4		
060-01		K	VFY	ARMS	ACCUM LEVEL SW NO. 2 LOW		GSAX7661E	OFF	2 OF 4		
060-02		K	VFY	ARMS	ACCUM LEVEL SW NO. 3 LOW		GSAX7681E	OFF	2 OF 4		
060-03		K	VFY	ARMS	ACCUM LEVEL SW NO. 4 LOW		GSAX7701E	OFF	OR		
060-04		K	VFY	ARMS	ACCUM LEVEL SW NO. 1 LOW		GSAX7646E	OFF	2 OF 4		
060-05		K	VFY	ARMS	ACCUM LEVEL SW NO. 2 LOW		GSAX7666E	OFF	2 OF 4		
060-06		K	VFY	ARMS	ACCUM LEVEL SW NO. 3 LOW		GSAX7686E	OFF	2 OF 4		
060-07		K	VFY	ARMS	ACCUM LEVEL SW NO. 4 LOW		GSAX7706E	OFF	INHBB MCO9		
060-10		K	VFY	ARMS	2700 PSI GN2 PRESS SW NORM		GSAX7731E	ON	1 OF 4	3.1-14	
060-11		K	VFY	ARMS	2700 PSI GN2 PRESS SW NORM		GSAX7736E	ON	1 OF 4	3.1-14	
060-12		K	VFY	ARMS	2700 PSI GN2 PRESS XDUCER	2000	GSAP7801A	PSIA	1 OF 4	3.1-14	
060-13		K	VFY	ARMS	2700 PSI GN2 PRESS XDUCER	2000	GSAP7806A	PSIA	INHBB M009	3.1-14	
060-14		K	VFY	ARMS	750 PSI GN2 PRESS XDUCER	250	GSAP7811A	NOHI	1 OF 2	3.1-14	
060-15		K	VFY	ARMS	750 PSI GN2 PRESS XDUCER	250	GSAP7816A	NOHI	INHBB MCO9	3.1-14	
060-50		V	VFY	ARMS	CCAA PRI DC POWER BUS ON IND		XEGXVAC3E	ON	1 OF 2		
060-51		V	VFY	ARMS	CCAA SEC DC POWER BUS ON IND		XEGXVA13E	ON	INHBB MCO9		
060-52		V	VFY	ARMS	CCAA PRI DC POWER ON IND		XEGXVA23E	ON	1 OF 2		
060-53		V	VFY	ARMS	CCAA SEC DC POWER ON IND		XEGXVA33E	ON	INHBB M009		
120-00		V	CMD	ARMS	A REMOTE POWER CONTROL		XEGKVPO1E	ON			
120-01		V	CMD	ARMS	B REMOTE POWER CONTROL		XEGKVP11E	ON			
122-00		V	VFY	ARMS	A REMOTE CONTROL IND PRI		XEGXVB53E	ON	1 OF 2		
122-01		V	VFY	ARMS	B REMOTE CONTROL IND SEC		XEGXVC53E	ON	INHBB MOAA		
126-00		K	CMD	ARMS	A LOCK PRI EXTEND LOCK VLV		GSAX7130E	OFF			
126-01		K	CMD	ARMS	A LOCK SEC EXTEND LOCK VLV		GSAX7150E	OFF			
126-02		K	CMD	ARMS	A LOCK PRI EXTEND LOCK VLV		GSAX7135E	OFF			
126-03		K	CMD	ARMS	A LOCK SEC EXTEND LOCK VLV		GSAX7155E	OFF			
126-50		V	CMD	ARMS	B LAUNCH POS RETR ENBL		XEGKVBC1E	ON			
126-51		V	CMD	ARMS	A LAUNCH POS RETR ENBL		XEGKVC01E	ON			
128-00		K	CMD	ARMS	AAA UNLOCK PRI EXTEND LOCK V		GSAX7120E	ON			
128-01		K	CMD	ARMS	AAA UNLOCK SEC EXTEND LOCK V		GSAX7140E	ON			
128-02		K	CMD	ARMS	AAA UNLOCK PRI EXTEND LOCK V		GSAX7125E	ON			
128-03		K	CMD	ARMS	AAA UNLOCK SEC EXTEND LOCK V		GSAX7145E	ON			
128-04		K	CMD	ARMS	AAA LCHBACK SPLY V-UNLATCH		GSAX751CE	ON			
128-05		K	CMD	ARMS	AAA LCHBACK SPLY V-UNLATCH		GSAX7515E	ON			
130-00		K	CMD	ARMS	AAA LCHBACK SPLY V UNLATCH		GSAX7510E	OFF			

SEQ	TIME	FUNCTION	FUNCTION	VALUE	ELSE	DURATION	UNIT
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: CD	: T	: :	: :	: :	: :	: :	: :
: CLOCK	: E	: :	: :	: :	: :	: :	: :
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130-01	K	CMD	ARMS	OAA LCHBACK SPLY V UNLATCH	GSAX7515E	OFF	
131-00	K	VFY	ARMS	A EXTEND TOP UNLOCKED SW	GSAX7551E	ON	1 OF 4
131-01	K	VFY	ARMS	A EXTEND TOP UNLOCKED SW	GSAX7556E	ON	1 OF 4
131-02	K	VFY	ARMS	A EXTEND TOP LOCKED SW	GSAX7541E	OFF	1 OF 4
131-03	K	VFY	ARMS	A EXTEND TOP LOCKED SW	GSAX7546E	OFF	GTO ST200
131-04	K	VFY	ARMS	A EXTEND BOTTOM UNLOCKED SW	GSAX7571E	ON	1 OF 4
131-05	K	VFY	ARMS	A EXTEND BOTTOM UNLOCKED SW	GSAX7576E	ON	1 OF 4
131-06	K	VFY	ARMS	A EXTEND BOTTOM LOCKED SW	GSAX7561E	OFF	1 OF 4
131-07	K	VFY	ARMS	A EXTEND BOTTOM LOCKED SW	GSAX7566E	OFF	GTO ST200
132-00	K	VFY	ARMS	A HINGESIDE LATCHED SW	GSAX7111E	OFF	1 OF 4
132-01	K	VFY	ARMS	A HINGESIDE LATCHED SW	GSAX7116E	OFF	1 OF 4
132-02	K	VFY	ARMS	A HINGESIDE UNLATCHED SW	GSAX7112E	ON	1 OF 4
132-03	K	VFY	ARMS	A HINGESIDE UNLATCHED SW	GSAX7117E	ON	GTO ST200
132-04	K	VFY	ARMS	A OUTSIDE LATCHED SW	GSAX7113E	OFF	1 OF 4
132-05	K	VFY	ARMS	A OUTSIDE LATCHED SW	GSAX7118E	OFF	1 OF 4
132-06	K	VFY	ARMS	A OUTSIDE UNLATCHED SW	GSAX7114E	ON	1 OF 4
132-07	K	VFY	ARMS	A OUTSIDE UNLATCHED SW	GSAX7119E	ON	GTO ST200
132-08	K	CMD	ARMS	OAA CLOSE GN2 INHIBIT V	GSAX7100E	ON	
132-09	K	CMD	ARMS	OAA CLOSE GN2 INHIBIT V	GSAX7105E	ON	
133-00	V	VFY	ARMS	B LAUNCH POS RETR ENABLE IND	XEGXV803E	ON	1 OF 2
133-01	V	VFY	ARMS	A LAUNCH POS RETR ENABLE IND	XEGXVC03E	ON	GTO ST200
133-02	V	CMD	ARMS	B LAUNCH POS RETR	XEGKV811E	ON	
133-03	V	CMD	ARMS	A LAUNCH POS RETR	XEGKVC11E	ON	
133-00	K	CMD	ARMS	OAA OPEN PRI RETRACT SUPPLY V	GSAX7210E	ON	
135-01	K	CMD	ARMS	OAA OPEN SEC RETRACT SUPPLY V	GSAX7250E	ON	
135-02	K	CMD	ARMS	OAA OPEN PRI RETRACT SUPPLY V	GSAX7215E	ON	
135-03	K	CMD	ARMS	OAA OPEN SEC RETRACT SUPPLY V	GSAX7255E	ON	
135-04	K	CMD	ARMS	OAA OPEN PRI RETRACT RETURN V	GSAX7230E	ON	
135-05	K	CMD	ARMS	OAA OPEN SEC RETRACT RETURN V	GSAX7270E	ON	
135-06	K	CMD	ARMS	OAA OPEN PRI RETRACT RETURN V	GSAX7235E	ON	
135-07	K	CMD	ARMS	OAA OPEN SEC RETRACT RETURN V	GSAX7275E	ON	1 OF 4
136-01	K	CVFY	ARMS	A FULLY RETRACTED SWITCH-RET	GSAX7626E	OFF	1 OF 4
136-02	K	CVFY	ARMS	A FULLY RETRACTED SWITCH-RET	GSAX7621E	OFF	1 OF 4
136-03	K	CVFY	ARMS	A FULLY RETRACTED SW-NOT SW	GSAX7636E	ON	1 OF 4
136-04	K	CVFY	ARMS	A FULLY RETRACTED SW-NO SW	GSAX7631E	ON	CPER P005
136-51	V	VFY	ARMS	CCAA B LAUNCH POSN LIMIT STOP IND	XEGXV813E	ON	1 OF 3
136-52	V	VFY	ARMS	CCAA A LAUNCH POSN LIMIT STOP IND	XEGXVC13E	ON	1 OF 3
136-53	V	VFY	ARMS	CCAA POSITION INDICATOR	XEGPVQ09A	NOLO	26-5 FT
145-00	K	VFY	ARMS	A FULLY RETRACTED SWITCH - RET	GSAX7626E	ON	1 OF 4
145-01	K	VFY	ARMS	A FULLY RETRACTED SWITCH - RET	GSAX7621E	ON	1 OF 4
145-02	K	VFY	ARMS	OAA POSITION INDICATION	GSAX7831A	NOLO	2 DEG

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
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145-03	K	VFY	ARMS	AAA	POSITION INDICATOR	GSAK7836A	NOLO	2	DEG	INHIB MAPU	3.1-16
296-00	V	CMD	ARMS	A	REMOTE POWER CONTROL	XEGKVP01E	OFF				
296-01	V	CMD	ARMS	B	REMOTE POWER CONTROL	XEGKVP11E	OFF				
312-00	K	CMD	ARMS	AAA	LATCHBACK SPLY VLV-LTCH ENAB	GSAK7501E	ON				
312-01	K	CMD	ARMS	AAA	LATCHBACK SPLY VLV-LTCH ENAB	GSAK7506E	ON				
312-02	K	CMD	ARMS	AAA	LATCHBACK SPLY VALVE-LATCH	GSAK750CE	ON				
312-03	K	CMD	ARMS	AAA	LATCHBACK SPLY VALVE-LATCH	GSAK7505E	ON				
314-00	K	CMD	ARMS	AAA	LATCHBACK SPLY VLV-LATCH	GSAK7500E	OFF				
314-01	K	CMD	ARMS	AAA	LATCHBACK SPLY VLV-LATCH	GSAK7505E	OFF				
314-02	K	CMD	ARMS	AAA	LATCHBACK SPLY VLV-LTCH ENAB	GSAK7501E	OFF				
314-03	K	CMD	ARMS	AAA	LATCHBACK SPLY VLV-LTCH ENAB	GSAK7506E	OFF				
539-00	K	CMD	ARMS	AAA	OPEN PRI RETRACT SUPPLY V	GSAK721CE	OFF				
539-01	K	CMD	ARMS	AAA	OPEN PRI RETRACT SUPPLY V	GSAK7215E	OFF				
539-02	K	CMD	ARMS	AAA	OPEN PRI RETRACT RETURN V	GSAK7230E	OFF				
539-03	K	CMD	ARMS	AAA	OPEN PRI RETRACT RETURN V	GSAK7235E	OFF				
540-00	K	CMD	ARMS	AAA	OPEN SEC RETRACT SUPPLY V	GSAK7250E	OFF				
540-01	K	CMD	ARMS	AAA	OPEN SEC RETRACT SUPPLY V	GSAK7255E	OFF				
540-02	K	CMD	ARMS	AAA	OPEN SEC RETRACT RETURN V	GSAK727CE	OFF				
540-03	K	CMD	ARMS	AAA	OPEN SEC RETRACT RETURN V	GSAK7275E	OFF				
541-00	K	CMD	ARMS	AAA	RESET PRI EXTEND PILOT V	GSAK7160E	OFF				
541-01	K	CMD	ARMS	AAA	RESET PRI EXTEND PILOT V	GSAK7165E	OFF				
541-02	K	CMD	ARMS	AAA	RESET SEC EXTEND PILOT V	GSAK7180E	OFF				
541-03	K	CMD	ARMS	AAA	RESET SEC EXTEND PILOT V	GSAK7185E	OFF				
542-00	K	CMD	ARMS	AAA	CLOSE PRI RETRACT SUPPLY V	GSAK720CE	ON				
542-01	K	CMD	ARMS	AAA	CLOSE PRI RETRACT SUPPLY V	GSAK7205E	ON				
542-02	K	CMD	ARMS	AAA	CLOSE PRI RETRACT RETURN V	GSAK7220E	ON				
542-03	K	CMD	ARMS	AAA	CLOSE PRI RETRACT RETURN V	GSAK7225E	ON				
543-00	K	CMD	ARMS	AAA	CLOSE SEC RETRACT SUPPLY V	GSAK7240E	ON				
543-01	K	CMD	ARMS	AAA	CLOSE SEC RETRACT SUPPLY V	GSAK7245E	ON				
543-02	K	CMD	ARMS	AAA	CLOSE SEC RETRACT RETURN V	GSAK7260E	ON				
543-03	K	CMD	ARMS	AAA	CLOSE SEC RETRACT RETURN V	GSAK7265E	ON				
544-00	K	CMD	ARMS	AAA	LCHBACK SPLY V-UNLATCH	GSAK7510E	ON				
544-01	K	CMD	ARMS	AAA	LCHBACK SPLY V-UNLATCH	GSAK7515E	ON				
545-00	K	CMD	ARMS	AAA	CLOSE GN2 INHIBIT V	GSAK7100E	ON				
545-01	K	CMD	ARMS	AAA	CLOSE GN2 INHIBIT V	GSAK7105E	ON				
546-00	K	CMD	ARMS	AAA	LOCK PRI EXTEND LOCK V	GSAK7130E	OFF				
546-01	K	CMD	ARMS	AAA	LOCK PRI EXTEND LOCK V	GSAK7135E	OFF				
546-02	K	CMD	ARMS	AAA	LOCK SEC EXTEND LOCK V	GSAK7150E	OFF				
546-03	K	CMD	ARMS	AAA	LOCK SEC EXTEND LOCK V	GSAK7155E	OFF				
547-00	K	CMD	ARMS	AAA	UNLOCK PRI EXTEND LOCK V	GSAK7120E	ON				
547-01	K	CMD	ARMS	AAA	UNLOCK PRI EXTEND LOCK V	GSAK7125E	ON				

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547-02	K	CMD	ARMS	OAA	UNLOCK	SEC	EXTEND	LOCK	V	GSAK714CE	ON		
547-03	K	CMD	ARMS	OAA	UNLOCK	SEC	EXTEND	LOCK	V	GSAK7145E	ON		
548-00	K	CMD	ARMS	OAA	OPEN	PRI	EXTEND	PILOT	V	GSAK7170E	ON		
548-01	K	CMD	ARMS	OAA	OPEN	PRI	EXTEND	PILOT	V	GSAK7175E	ON		
548-02	K	CMD	ARMS	OAA	OPEN	SEC	EXTEND	PILOT	V	GSAK7190E	ON		
548-03	K	CMD	ARMS	OAA	OPEN	SEC	EXTEND	PILOT	V	GSAK7195E	ON		
549-00	K	CMD	ARMS	OAA	OPEN	ACCUM	CHARGING	V	GSAK708CE	ON			
549-01	K	CMD	ARMS	OAA	OPEN	ACCUM	CHARGING	V	GSAK7085E	ON			
549-02	K	CMD	ARMS	OAA	LCHBACK	SPLY	V-UNLATCH		GSAK7510E	OFF			
549-03	K	CMD	ARMS	OAA	LCHBACK	SPLY	V-UNLATCH		GSAK7515E	OFF			
550-00	V	CMD	ARMS	A	REMOTE	POWER	CONTROL		XEGKVP01E	ON			
550-01	V	CMD	ARMS	B	REMOTE	POWER	CONTROL		XEGKVP11E	ON			
550-02	V	CMD	ARMS	B	DR	LAUNCH	POS	RETR	XEGKVB11E	OFF			
550-03	V	CMD	ARMS	A	DR	LAUNCH	POS	RETR	XEGKVC11E	OFF			
550-04	V	CMD	ARMS	B	DR	LAUNCH	POS	RETR	XEGKVB01E	OFF			
550-05	V	CMD	ARMS	A	DR	LAUNCH	POS	RETR	XEGKVC01E	OFF			
550-06	V	CMD	ARMS	B	EMERGENCY	EXTEND	ENABLE	CMD	XEGKVH21E	ON			
550-07	V	CMD	ARMS	A	EMERGENCY	EXTEND	ENABLE	CMD	XEGKVC21E	ON			
550-08	V	VFY	ARMS	B	EMERGENCY	EXTEND	ENABLE	IND	XEGXVB23E	ON	1 OF 2		
550-09	V	VFY	ARMS	A	EMERGENCY	EXTEND	ENABLE	IND	XEGXVC23E	ON	DISPLAY		
550-10	V	CMD	ARMS	B	EMERGENCY	EXTEND	CMD		XEGKVB31E	ON			
550-11	V	CMD	ARMS	A	EMERGENCY	EXTEND	CMD		XEGKVC31E	ON			
624-01	K	VFY	ARMS	PRI	FULLY	EXTENDED	SW		GSAX7581E	ON	1 OF 4		
624-02	K	VFY	ARMS	PRI	FULLY	EXTENDED	SW		GSAX7586E	ON	1 OF 4		
624-03	K	VFY	ARMS	SEC	FULLY	EXTENDED	SW		GSAX7601E	ON	1 OF 4		
624-04	K	VFY	ARMS	SEC	FULLY	EXTENDED	SW		GSAX7606E	ON	GTO ST470		
625-00	K	CMD	ARMS	OAA	UNLOCK	PRI	EXT	LOCK	VLV	GSAX7120E	OFF		
625-01	K	CMD	ARMS	OAA	UNLOCK	PRI	EXT	LOCK	VLV	GSAX7125E	OFF		
625-02	K	CMD	ARMS	OAA	UNLOCK	SEC	EXT	LOCK	VLV	GSAX7140E	OFF		
625-03	K	CMD	ARMS	OAA	UNLOCK	SEC	EXT	LOCK	VLV	GSAX7145E	OFF		
626-00	K	CMD	ARMS	OAA	LOCK	PRI	EXT	LOCK	VLV	GSAX713CE	ON		
626-01	K	CMD	ARMS	OAA	LOCK	PRI	EXT	LOCK	VLV	GSAX7135E	ON		
626-02	K	CMD	ARMS	OAA	LOCK	SEC	EXT	LOCK	VLV	GSAX7150E	ON		
626-03	K	CMD	ARMS	OAA	LOCK	SEC	EXT	LOCK	VLV	GSAX7155E	ON		
627-00	K	CMD	ARMS	OAA	PRI	OPEN	EXT	PILOT	VLV	GSAX7170E	OFF		
627-01	K	CMD	ARMS	OAA	PRI	OPEN	EXT	PILOT	VLV	GSAX7175E	OFF		
627-02	K	CMD	ARMS	OAA	SEC	OPEN	EXT	PILOT	VLV	GSAX7150E	OFF		
627-03	K	CMD	ARMS	OAA	SEC	OPEN	EXT	PILOT	VLV	GSAX7195E	OFF		
628-00	K	CMD	ARMS	OAA	PRI	RESET	EXT	PILOT	VLV	GSAX7160E	ON		
628-01	K	CMD	ARMS	OAA	PRI	RESET	EXT	PILOT	VLV	GSAX7165E	ON		
628-02	K	CMD	ARMS	OAA	SEC	RESET	EXT	PILOT	VLV	GSAX7180E	ON		

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GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI 590C5 - L

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
:	CD	T	:	:	:	DESIGNATOR	:	:	:	PAGE
:	CLOCK	E	:	:	:	:	OR	LO	HIGH	UNIT
:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:

628-03	K	CMD	ARMS	AAA	SEC RESET EXT PILOT VLV	GSAX7185E	ON			
629-00	K	CMD	ARMS	AAA	LOCK PRI EXT LOCK VLV	GSAX7130E	OFF			
629-01	K	CMD	ARMS	AAA	LOCK PRI EXT LOCK VLV	GSAX7135E	OFF			
629-02	K	CMD	ARMS	AAA	LOCK SEC EXT LOCK VLV	GSAX7150E	OFF			
629-03	K	CMD	ARMS	AAA	LOCK SEC EXT LOCK VLV	GSAX7155E	OFF			
630-00	K	CMD	ARMS	AAA	PRI RESET EXT PILOT VLV	GSAX7160E	OFF			
630-01	K	CMD	ARMS	AAA	PRI RESET EXT PILOT VLV	GSAX7165E	OFF			
630-02	K	CMD	ARMS	AAA	SEC RESET EXT PILOT VLV	GSAX7180E	OFF			
630-03	K	CMD	ARMS	AAA	SEC RESET EXT PILOT VLV	GSAX7185E	OFF			
630-04	K	CMD	ARMS	AAA	CLOSE PRI RETRACT SUP VLV	GSAX7200E	OFF			
630-05	K	CMD	ARMS	AAA	CLOSE PRI RETRACT SUP VLV	GSAX7205E	OFF			
630-06	K	CMD	ARMS	AAA	CLOSE PRI RETRACT RET VLV	GSAX7220E	OFF			
630-07	K	CMD	ARMS	AAA	CLOSE PRI RETRACT RET VLV	GSAX7225E	OFF			
630-08	K	CMD	ARMS	AAA	CLOSE PRI RETRACT SUP VLV	GSAX7240E	OFF			
630-09	K	CMD	ARMS	AAA	CLOSE PRI RETRACT SUP VLV	GSAX7245E	OFF			
630-10	K	CMD	ARMS	AAA	CLOSE PRI RETRACT RET VLV	GSAX7260E	OFF			
630-11	K	CMD	ARMS	AAA	CLOSE PRI RETRACT RET VLV	GSAX7265E	OFF			
631-00	K	VFY	ARMS	AAA	ACCUM LEVEL SW NO.1 NORMAL	GSAX7651E	ON		4 OF 4	
631-01	K	VFY	ARMS	AAA	ACCUM LEVEL SW NO.2 NORMAL	GSAX7671E	ON		4 OF 4	
631-02	K	VFY	ARMS	AAA	ACCUM LEVEL SW NO.3 NORMAL	GSAX7691E	ON		4 OF 4	
631-03	K	VFY	ARMS	AAA	ACCUM LEVEL SW NO.4 NORMAL	GSAX7711E	ON		OR	
631-04	K	VFY	ARMS	AAA	ACCUM LEVEL SW NO.1 NORMAL	GSAX7656E	ON		4 OF 4	
631-05	K	VFY	ARMS	AAA	ACCUM LEVEL SW NO.2 NORMAL	GSAX7676E	ON		4 OF 4	
631-06	K	VFY	ARMS	AAA	ACCUM LEVEL SW NO.3 NORMAL	GSAX7696E	ON		4 OF 4	
631-07	K	VFY	ARMS	AAA	ACCUM LEVEL SW NO.4 NORMAL	GSAX7716E	ON		GTO ST480	
632-00	K	CMD	ARMS	AAA	OPEN ACCUM CHARGING	GSAX7080E	OFF			
632-01	K	CMD	ARMS	AAA	OPEN ACCUM CHARGING	GSAX7085E	OFF			
632-02	K	CMD	ARMS	AAA	CLOSE GN2 INHIBIT V	GSAX7100E	OFF			
632-03	K	CMD	ARMS	AAA	CLOSE GN2 INHIBIT V	GSAX7105E	OFF			
633-01	V	VFY	ARMS	CCAA	POSITION INDICATOR	XEGPVQ09A	63.5	NOHI	FT	1 OF 3
633-02	V	VFY	ARMS	B	FORWARD STOP LIMIT IND	XEGXVB33E	ON			1 OF 3
633-03	V	VFY	ARMS	A	FORWARD STOP LIMIT IND	XEGXVC43E	ON			GTO ST490
633-04	V	CMD	ARMS	B	EMERGENCY EXTEND CMD	XEGKVB31E	OFF			
633-05	V	CMD	ARMS	A	EMERGENCY EXTEND CMD	XEGKVC31E	OFF			
633-06	V	CMD	ARMS	B	EMERGENCY EXTEND ENABLE CMD	XEGKVB21E	OFF			
633-07	V	CMD	ARMS	A	EMERGENCY EXTEND ENABLE CMD	XEGKVC21E	OFF			
633-08	V	VFY	ARMS	B	EMERGENCY EXTEND ENABLE IND	XEGXVB23E	OFF			DISPLAY
633-09	V	VFY	ARMS	A	EMERGENCY EXTEND ENABLE IND	XEGXVC23E	OFF			DISPLAY
633-10	V	CMD	ARMS	A	REMOTE POWER CONTROL	XEGKVP01E	OFF			
633-11	V	CMD	ARMS	B	REMOTE POWER CONTROL	XEGKVP11E	OFF			
895-00	K	CMD	ARMS	AAA	OPEN PRI RETRACT SUPPLY V	GSAX7210E	OFF			



SEQ	S	I	TIME	CD	FUNC	DISC	NOMENCLATURE	FUNCTION	DESIGNATOR	SINGL	ELSE	DURATION	LCC	PAGE	UNIT
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895-01	K	CMD	ARMS	AAA	OPEN	PRI	RETRACT SUPPLY V	GSAX7215E	OFF						
895-02	K	CMD	ARMS	AAA	OPEN	PRI	RETRACT RETURN	GSAX7230E	OFF						
895-03	K	CMD	ARMS	AAA	OPEN	PRI	RETRACT RETURN V	GSAX7235E	OFF						
895-04	K	CMD	ARMS	AAA	OPEN	SEC	RETRACT SUPPLY V	GSAX7250E	OFF						
895-05	K	CMD	ARMS	AAA	OPEN	SEC	RETRACT SUPPLY V	GSAX7255E	OFF						
895-06	K	CMD	ARMS	AAA	OPEN	SEC	RETRACT RETURN V	GSAX7270E	OFF						
895-07	K	CMD	ARMS	AAA	OPEN	SEC	RETRACT RETURN V	GSAX7275E	OFF						
896-00	K	CMD	ARMS	AAA	RESET	PRI	RETRACT SUPPLY VLV	GSAX7200E	ON						
896-01	K	CMD	ARMS	AAA	RESET	PRI	RETRACT SUPPLY VLV	GSAX7205E	ON						
896-02	K	CMD	ARMS	AAA	RESET	PRI	RETRACT SUPPLY VLV	GSAX7240E	ON						
896-03	K	CMD	ARMS	AAA	RESET	SEC	RETRACT SUPPLY VLV	GSAX7245E	ON						
896-04	K	CMD	ARMS	AAA	RESET	PRI	RETRACT RETURN VLV	GSAX7220E	ON						
896-05	K	CMD	ARMS	AAA	RESET	PRI	RETRACT RETURN VLV	GSAX7225E	ON						
896-06	K	CMD	ARMS	AAA	RESET	SEC	RETRACT RETURN VLV	GSAX7260E	ON						
896-07	K	CMD	ARMS	AAA	RESET	SEC	RETRACT RETURN VLV	GSAX7265E	ON						
897-00	K	VFY	ARMS	AAA	PRI	RETR	SUPPLY VLV RETR IND	GSAX7211E	OFF			1 OF 4			
897-01	K	VFY	ARMS	AAA	PRI	RETR	SUPPLY VLV RETR IND	GSAX7216E	OFF			1 OF 4			
897-02	K	VFY	ARMS	AAA	SEC	RETR	SUPPLY VLV RETR IND	GSAX7251E	OFF			1 OF 4			
897-03	K	VFY	ARMS	AAA	SEC	RETR	SUPPLY VLV RETR IND	GSAX7256E	OFF			OR			
897-04	K	VFY	ARMS	AAA	PRI	RETR	RETURN VLV RETR IND	GSAX7231E	OFF			1 OF 4			
897-05	K	VFY	ARMS	AAA	PRI	RETR	RETURN VLV RETR IND	GSAX7236E	OFF			1 OF 4			
897-06	K	VFY	ARMS	AAA	SEC	RETR	RETURN VLV RETR IND	GSAX7271E	OFF			1 OF 4			
897-07	K	VFY	ARMS	AAA	SEC	RETR	RETURN VLV RETR IND	GSAX7276E	OFF			DISPLAY			
898-00	K	VFY	ARMS	AAA	PRI	RETR	SUPPLY VLV RESET IND	GSAX7201E	ON			1 OF 4			
898-01	K	VFY	ARMS	AAA	PRI	RETR	SUPPLY VLV RESET IND	GSAX7206E	ON			1 OF 4			
898-02	K	VFY	ARMS	AAA	SEC	RETR	SUPPLY VLV RESET IND	GSAX7241E	ON			1 OF 4			
898-03	K	VFY	ARMS	AAA	SEC	RETR	SUPPLY VLV RESET IND	GSAX7246E	ON			OR			
898-04	K	VFY	ARMS	AAA	PRI	RETR	RETURN VLV RESET IND	GSAX7221E	ON			1 OF 4			
898-05	K	VFY	ARMS	AAA	PRI	RETR	RETURN VLV RESET IND	GSAX7226E	ON			1 OF 4			
898-06	K	VFY	ARMS	AAA	SEC	RETR	RETURN VLV RESET IND	GSAX7261E	ON			1 OF 4			
898-07	K	VFY	ARMS	AAA	SEC	RETR	RETURN VLV RESET IND	GSAX7266E	ON			DISPLAY			
899-00	K	CMD	ARMS	AAA	RESET	PRI	RETRACT SUPPLY VLV	GSAX7200E	OFF						
899-01	K	CMD	ARMS	AAA	RESET	PRI	RETRACT SUPPLY VLV	GSAX7205E	OFF						
899-02	K	CMD	ARMS	AAA	RESET	SEC	RETRACT SUPPLY VLV	GSAX7240E	OFF						
899-03	K	CMD	ARMS	AAA	RESET	SEC	RETRACT SUPPLY VLV	GSAX7245E	OFF						
899-04	K	CMD	ARMS	AAA	RESET	PRI	RETRACT RETURN VLV	GSAX7220E	OFF						
899-05	K	CMD	ARMS	AAA	RESET	PRI	RETRACT RETURN VLV	GSAX7225E	OFF						
899-06	K	CMD	ARMS	AAA	RESET	SEC	RETRACT RETURN VLV	GSAX7260E	OFF						
899-07	K	CMD	ARMS	AAA	RESET	SEC	RETRACT RETURN VLV	GSAX7265E	OFF						
900-00	K	CMD	ARMS	AAA	UNLOCK	PRI	EXTEND LOCK V	GSAX7120E	OFF						
900-01	K	CMD	ARMS	AAA	UNLOCK	PRI	EXTEND LOCK V	GSAX7125E	OFF						

SEQ	TIME	FUNC:DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
:	CD	:	:	DESIGNATOR:SINGL	:	:	:	PAGE
:	CLOCK	E	:	OR LO:HIGH	UNIT	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
900-02	K	CMD	ARMS	AAA UNLOCK SEC EXTEND LOCK V	GSAX7140E	OFF		
900-03	K	CMD	ARMS	AAA UNLOCK SEC EXTEND LOCK V	GSAX7145E	OFF		
901-00	K	CVFY	ARMS	A FULLY RETRACTED SWITCH - RET	GSAX7621E	ON	1 OF 4	3.1-16
901-01	K	CVFY	ARMS	A FULLY RETRACTED SWITCH - RET	GSAX7626E	ON	1 OF 4	3.1-16
901-02	K	CVFY	ARMS	KARMS RETRACTED POSITION SWITCH	GSAX7831A	NOL0	2	DEG
901-03	K	CVFY	ARMS	AAA POSITION INDICATOR	GSAX7836A	NOL0	2	DEG
902-00	K	CMD	ARMS	AAA OPEN ACCUM CHARGING V	GSAX7080E	ON		
902-01	K	CMD	ARMS	AAA OPEN ACCUM CHARGING V	GSAX7085E	ON		
903-00	K	VFY	ARMS	AAA ACCUM CHARGE V SW-VALVE OPEN	GSAX7081E	ON	1 OF 4	
903-01	K	VFY	ARMS	AAA ACCUM CHARGE V SW-VALVE OPEN	GSAX7086E	ON	1 OF 4	
903-02	K	VFY	ARMS	AAA ACCUM CHARGE V SW-VALVE CLOSE	GSAX7082E	OFF	1 OF 4	
903-03	K	VFY	ARMS	AAA ACCUM CHARGE V SW-VALVE CLOSE	GSAX7087E	OFF	GTO ST20	
904-00	K	VFY	ARMS	AAA ACCUM LEVEL SW NO. 1 NORMAL	GSAX7651E	ON	4 OF 4	
904-01	K	VFY	ARMS	AAA ACCUM LEVEL SW NO. 2 NORMAL	GSAX7671E	ON	4 OF 4	
904-02	K	VFY	ARMS	AAA ACCUM LEVEL SW NO. 3 NORMAL	GSAX7691E	ON	4 OF 4	
904-03	K	VFY	ARMS	AAA ACCUM LEVEL SW NO. 4 NORMAL	GSAX7711E	ON	OR	
904-04	K	VFY	ARMS	AAA ACCUM LEVEL SW NO. 1 NORMAL	GSAX7656E	ON	4 OF 4	
904-05	K	VFY	ARMS	AAA ACCUM LEVEL SW NO. 2 NORMAL	GSAX7676E	ON	4 OF 4	
904-06	K	VFY	ARMS	AAA ACCUM LEVEL SW NO. 3 NORMAL	GSAX7696E	ON	4 OF 4	
904-07	K	VFY	ARMS	AAA ACCUM LEVEL SW NO. 4 NORMAL	GSAX7716E	ON	4 OF 4	
905-00	K	CMD	ARMS	AAA OPEN ACCUM CHARGING V	GSAX7080E	OFF		
905-01	K	CMD	ARMS	AAA OPEN ACCUM CHARGING V	GSAX7085E	OFF		
906-00	K	VFY	ARMS	AAA ACCUM CHARGE V SW-VALVE OPEN	GSAX7081E	OFF	1 OF 4	
906-01	K	VFY	ARMS	AAA ACCUM CHARGE V SW-VALVE OPEN	GSAX7086E	OFF	1 OF 4	
906-02	K	VFY	ARMS	AAA ACCUM CHARGE V SW-VALVE CLOSE	GSAX7082E	ON	1 OF 4	
906-03	K	VFY	ARMS	AAA ACCUM CHARGE V SW-VALVE CLOSE	GSAX7087E	ON	GTO ST40	
907-00	K	CMD	ARMS	AAA CLOSE GN2 INHIBIT V	GSAX7100E	OFF		
907-01	K	CMD	ARMS	AAA CLOSE GN2 INHIBIT V	GSAX7105E	OFF		
907-02	K	VFY	ARMS	AAA GN2 INHIBIT V SW-VALVE OPEN	GSAX7101E	ON	1 OF 4	
907-03	K	VFY	ARMS	AAA GN2 INHIBIT V SW-VALVE OPEN	GSAX7106E	ON	1 OF 4	
907-04	K	VFY	ARMS	AAA GN2 INHIBIT V SW-VALVE CLOSE	GSAX7102E	OFF	1 OF 4	
907-05	K	VFY	ARMS	AAA GN2 INHIBIT V SW-VALVE CLOSE	GSAX7107E	OFF	GTO ST50	
009-00	CVFY	BELE	LH	VOLTAGE OPERATIONAL BUS A	B76V1600H	24.8	32-0	V
009-01	CVFY	BELE	LH	VOLTAGE OPERATIONAL BUS A	B76V1600C1	25.5	31.3	V
009-02	CVFY	BELE	RH	VOLTAGE OPERATIONAL BUS A	B76V2600H	24.8	32-0	V
009-03	CVFY	BELE	RH	VOLTAGE OPERATIONAL BUS A	B76V2600C1	25.5	31.3	V
009-04	CVFY	BELE	LH	VOLTAGE OPERATIONAL BUS B	B76V1601H	24.8	32-0	V
009-05	CVFY	BELE	LH	VOLTAGE OPERATIONAL BUS B	B76V1601C1	25.5	31.3	V
009-06	CVFY	BELE	RH	VOLTAGE OPERATIONAL BUS B	B76V2601H	24.8	32-0	V
009-07	CVFY	BELE	RH	VOLTAGE OPERATIONAL BUS B	B76V2601C1	25.5	31.3	V
052-05	VFY	BELE	LH	VOLTAGE RECOV BATT	B76V1602C1	26.7	39.8	V

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

DATE 12-10-85

OMI 59005 - L

SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	SINGL	UNIT	VALUE	ELSE	DURATION	LCC	FACE
:	:	:	:	:	:	:	:	:	:	:	:	:
:	CD	:	:	:	DESIGNATOR	:	:	:	:	:	:	:
:	CLOCK	E	:	:	:	OR	LO	HIGH	:	:	:	:

052-07		VFY	BELE	RH VOLTAGE RECOV BATT	B76V2602C1		26.7	39.8			INHB	MC09	2.2-15
055-00		VFY	BELE	LH TEMPERATURE RECOVERY BATTERY	B76T1500C1		34.2	102.8			INHB	M009	2.2-6
055-01		VFY	BELE	RH TEMPERATURE RECOVERY BATTERY	B76T2500C1		34.2	102.8			INHB	M009	2.2-6
111-00		ICL	BELE	LH VOLTAGE OPERATIONAL BUS A	B76V1600H								
111-01		ICL	BELE	LH VOLTAGE OPERATIONAL BUS B	B76V1601H								
111-02		ICL	BELE	RH VOLTAGE OPERATIONAL BUS A	B76V2600CH								
111-03		ICL	BELE	RH VOLTAGE OPERATIONAL BUS B	B76V2601H								
002-00		CVFY	BHYD	LH EVENT APU A ISLN VALVE CLOSED	B46X1853X1	ON				1 OF 2			2.1-10
002-01		CVFY	BHYD	LH EVENT APU A ISLN VALVE OPEN	B46X1851X1	OFF				LCC-3			2.1-10
002-02		CVFY	BHYD	LH EVENT APU B ISLN VALVE CLOSED	B46X1854X1	ON				1 OF 2			2.1-10
002-03		CVFY	BHYD	LH EVENT APU B ISLN VALVE OPEN	B46X1852X1	OFF				LCC-3			2.1-10
002-04		CVFY	BHYD	RH EVENT APU A ISLN VALVE CLOSED	B46X2853X1	ON				1 OF 2			2.1-10
002-05		CVFY	BHYD	RH EVENT APU A ISLN VALVE OPEN	B46X2851X1	OFF				LCC-3			2.1-10
002-06		CVFY	BHYD	RH EVENT APU B ISLN VALVE CLOSED	B46X2854X1	ON				1 OF 2			2.1-10
002-07		CVFY	BHYD	RH EVENT APU B ISLN VALVE OPEN	B46X2852X1	OFF				LCC-3			2.1-10
002-08		CVFY	BHYD	RH EV APU SEC SP CON VLV CLD SYS B	B46X2863X1	ON				LCC-3			2.1-10
002-09		CVFY	BHYD	LH EV APU SEC SP CON VLV CLD SYS A	B46X1861X1	ON				LCC-3			2.1-10
002-10		CVFY	BHYD	LH EV APU SEC SP CON VLV CLD SYS B	B46X1863X1	ON				LCC-3			2.1-10
002-11		CVFY	BHYD	RH EV APU SEC SP CON VLV CLD SYS A	B46X2861X1	ON				LCC-3			2.1-10
032-00	ST170	CVFY	BHYD	LH N2H4 BTL GN2 PRESS SYS A	B46P1305C1	350		415			PSIA		2.1-4
032-01		CVFY	BHYD	LH N2H4 BTL GN2 PRESS SYS B	B46P1306C1	350		415			PSIA		2.1-4
032-02		CVFY	BHYD	RH N2H4 BTL GN2 PRESS SYS A	B46P2305C1	350		415			PSIA		2.1-4
032-03		CVFY	BHYD	RH N2H4 BTL GN2 PRESS SYS B	B46P2306C1	350		415			PSIA		2.1-4
033-00		ACL	BHYD	LH TEMP GAS GENERATOR BED SYS A	B46T1503C1	200		220			DEGF		2.1-7
033-01		ACL	BHYD	LH TEMP GAS GENERATOR BED SYS B	B46T1504C1	200		220			DEGF		2.1-7
033-02		ACL	BHYD	RH TEMP GAS GENERATOR BED SYS A	B46T2503C1	200		220			DEGF		2.1-7
033-03		ACL	BHYD	RH TEMP GAS GENERATOR BED SYS B	B46T2504C1	200		220			DEGF		2.1-7
050-00		VFY	BHYD	LH N2H4 BTL TEMP SYS A	B46T1501C1	45.0		139.5			DEGF		2.1-6
050-01		VFY	BHYD	LH N2H4 BTL TEMP SYS B	B46T1502C1	45.0		139.5			DEGF		2.1-6
050-02		VFY	BHYD	LH HYD FLUID RSVR LEVEL SYS A	B58Q1350C1	60		80			PCT		2.1-8
050-03		VFY	BHYD	LH HYD FLUID RSVR LEVEL SYS B	B58Q1351C1	60		80			PCT		2.1-8
050-04		VFY	BHYD	RH N2H4 BTL TEMP SYS A	B46T2501C1	45.0		139.5			DEGF		2.1-6
050-05		VFY	BHYD	RH N2H4 BTL TEMP SYS B	B46T2502C1	45.0		139.5			DEGF		2.1-6
050-06		VFY	BHYD	RH HYD FLUID RSVR LEVEL SYS A	B58Q2350C1	60		80			PCT		2.1-8
050-07		VFY	BHYD	RH HYD FLUID RSVR LEVEL SYS B	B58Q2351C1	60		80			PCT		2.1-8
053-00		VFY	BHYD	LH DELTA PRESS SECONDARY A ROCK	B58P1311A1	-237		+237			PSID		2.1-17
053-01		VFY	BHYD	LH DELTA PRESS SECONDARY B ROCK	B58P1312A1	-237		+237			PSID		2.1-17
053-02		VFY	BHYD	LH DELTA PRESS SECONDARY C ROCK	B58P1313A1	-237		+237			PSID		2.1-17
053-03		VFY	BHYD	LH DELTA PRESS SECONDARY D ROCK	B58P1314A1	-237		+237			PSID		2.1-17
053-04		VFY	BHYD	LH DELTA PRESS SECONDARY A TILT	B58P1315A1	-237		+237			PSID		2.1-17
053-05		VFY	BHYD	LH DELTA PRESS SECONDARY B TILT	B58P1316A1	-237		+237			PSID		2.1-17

DATE 12-10-85 GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 OMI 890C5 - L

SEQ	TIME : I : S	FUNC: DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION
:	CD : T	:	:	DESIGNATOR: SINGL	:	:	LCC
:	CLOCK : E	:	:	:OR LO:HIGH	:	:	PAGE
:	:	:	:	:	:	:	:
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053-06	VFY	BHYD	LH DELTA PRESS SECONDARY C TILT	B58P1317A1	-237	PSID	2.1-17
053-07	VFY	BHYD	LH DELTA PRESS SECONDARY D TILT	B58P1318A1	-237	PSID	2.1-17
053-08	VFY	BHYD	RH DELTA PRESS SECONDARY A ROCK	B58P2311A1	-237	PSID	2.1-17
053-09	VFY	BHYD	RH DELTA PRESS SECONDARY B ROCK	B58P2312A1	-237	PSID	2.1-17
053-10	VFY	BHYD	RH DELTA PRESS SECONDARY C ROCK	B58P2313A1	-237	PSID	2.1-17
053-11	VFY	BHYD	RH DELTA PRESS SECONDARY D ROCK	B58P2314A1	-237	PSID	2.1-17
053-12	VFY	BHYD	RH DELTA PRESS SECONDARY A TILT	B58P2315A1	-237	PSID	2.1-17
053-13	VFY	BHYD	RH DELTA PRESS SECONDARY B TILT	B58P2316A1	-237	PSID	2.1-17
053-14	VFY	BHYD	RH DELTA PRESS SECONDARY C TILT	B58P2317A1	-237	PSID	2.1-17
053-15	VFY	BHYD	RH DELTA PRESS SECONDARY D TILT	B58P2318A1	-237	PSID	2.1-17
112-00	K	ACL	6684 LOW FLOW GPM	GHYR2367A			
112-01	K	ACL	6685 LOW FLOW GPM	GHYR2667A			
112-02	K	ACL	6687 LOW FLOW GPM	GHYR2967A			
112-03	K	ACL	6688 LOW FLOW GPM	GHYR3267A			
112-04	ACL	BHYD	HRS 6684 BYPASS VALVE OPEN CMD	GHYK2260ER			
112-05	ACL	BHYD	HRS 6684 BYPASS VALVE CLOSE CMD	GHYK2270ER			
112-06	ACL	BHYD	HRS 6685 BYPASS VALVE OPEN	GHYK2560ER			
112-07	ACL	BHYD	HRS 6685 BYPASS VALVE CLOSE	GHYK2570ER			
112-08	ACL	BHYD	HRS 6687 BYPASS VALVE OPEN	GHYK2860ER			
112-09	ACL	BHYD	HRS 6687 BYPASS VALVE CLOSE	GHYK2870ER			
112-10	ACL	BHYD	HRS 6688 BYPASS VALVE OPEN	GHYK3160ER			
112-11	ACL	BHYD	HRS 6688 BYPASS VALVE CLOSE	GHYK3170ER			
112-12	ACL	BHYD	6684 RETURN PRESSURE	GHP2365A			
112-13	ACL	BHYD	6685 RETURN PRESSURE	GHP2665A			
112-14	ACL	BHYD	6687 RETURN PRESSURE	GHP2965A			
112-15	ACL	BHYD	6688 RETURN PRESSURE	GHP3265A			
112-16	ACL	BHYD	6683 PUMP NO 1 TEMPERATURE	GHYT0286A			
112-17	ACL	BHYD	6683 PUMP NO 2 TEMPERATURE	GHYT0288A			
112-18	ACL	BHYD	6686 PUMP NO 1 TEMPERATURE	GHYT0586A			
112-19	ACL	BHYD	6686 PUMP NO 2 TEMPERATURE	GHYT0588A			
112-20	ACL	BHYD	6684 BYPASS VALVE OPEN	GHYX2262E			
112-21	ACL	BHYD	6684 BYPASS VALVE CLOSE	GHYX2263E			
112-22	ACL	BHYD	6685 BYPASS VALVE OPEN	GHYX2562E			
112-23	ACL	BHYD	6685 BYPASS VALVE CLOSE	GHYX2563E			
112-24	ACL	BHYD	6687 BYPASS VALVE OPEN	GHYX2862E			
112-25	ACL	BHYD	6687 BYPASS VALVE CLOSE	GHYX2863E			
112-26	ACL	BHYD	6688 BYPASS VALVE OPEN	GHYX3162E			
112-27	ACL	BHYD	6688 BYPASS VALVE CLOSE	GHYX3163E			
112-28	ACL	BHYD	LH RATE APU A TURBINE SPEED SNR 2	B46R1408C1			
112-29	ACL	BHYD	LH RATE APU B TURBINE SPEED SNR 2	B46R1409C1			
112-30	ACL	BHYD	RH RATE APU A TURBINE SPEED SNR 2	B46R2408C1			

SEQ	TIME	CD	DISC	NOMENCLATURE	FUNCTION	DESIGNATOR	SINGL	OR	LO	HIGH	UNIT	VALUE	ELSE	DURATION	LCC	FACE	
112-31				ACL BHYD RH RATE APU B TURBINE SPEED	SNSR 2	B46R2409C1											
112-32				ACL BHYD LH POSITION TVC ROCK ACTUATOR		B58H115CC1											
112-33				ACL BHYD LH POSITION TVC TILT ACTUATOR		B58H1151C1											
112-34				ACL BHYD RH POSITION TVC ROCK ACTUATOR		B58H2150C1											
112-35				ACL BHYD RH POSITION TVC TILT ACTUATOR		B58H2151C1											
112-40				ACL BHYD AFT SKIRTI GN2 PURGE TEMP		GHYT8013A											
112-41				ACL BHYD AFT SKIRTI PURGE GN2 PRES		GHP8014A											
112-42				ACL BHYD HRS 6430 AFT SKIRTI PURG_HTR ON C		GHYK8002ER											
112-43				ICL BHYD LH TEMP GAS GENERATOR BED SYS A		B46T1503C1											
112-44				ICL BHYD LH TEMP GAS GENERATOR BED SYS B		B46T1504C1											
112-45				ICL BHYD RH TEMP GAS GENERATOR BED SYS A		B46T2503C1											
112-47				CMD BHYD LH APU A GG HTR 2 ON CMD		B46K3023XL	OFF										
112-48				CMD BHYD LH APU B GG HTR 2 ON CMD		B46K3025XL	OFF										
112-49				CMD BHYD RH APU A GG HTR 2 ON CMD		B46K4023XL	OFF										
112-50				CMD BHYD RH APU B GG HTR 2 ON CMD		B46K4025XL	OFF										
112-51				CMD BHYD LH APU A GG HTR 1 ON CMD		B46K3024XL	ON										
112-52				CMD BHYD LH APU B GG HTR 1 ON CMD		B46K3024XL	ON										
112-53				CMD BHYD RH APU A GG HTR 1 ON CMD		B46K4022XL	ON										
112-54				CMD BHYD RH APU B GG HTR 1 ON CMD		B46K4024XL	ON										
243-00				ICL BHYD LH RATE APU A TURBINE SPEED	SNSR 2	B46R1408C1	00.0	00.0				00.0				KRPM	
243-01				ICL BHYD LH RATE APU B TURBINE SPEED	SNSR 2	B46R1409C1	00.0	00.0				00.0					KRPM
243-02				ICL BHYD RH RATE APU A TURBINE SPEED	SNSR 2	B46R2408C1	00.0	00.0				00.0					KRPM
243-03				ICL BHYD RH RATE APU B TURBINE SPEED	SNSR 2	B46R2409C1	00.0	00.0				00.0					KRPM
247-00				CVFY BHYD LH HYD FLUID RSVR LEVEL SYS A		B58Q1350C1	50					NOHI					PCT
247-01				CVFY BHYD LH HYD FLUID RSVR LEVEL SYS B		B58Q1351C1	50					NOHI					PCT
247-02				CVFY BHYD RH HYD FLUID RSVR LEVEL SYS A		B58Q2350C1	50					NOHI					PCT
247-03				CVFY BHYD RH HYD FLUID RSVR LEVEL SYS B		B58Q2351C1	50					NOHI					PCT
247-04				CVFY BHYD LH N2H4 BTL GN2 PRESS SYS A		B46P1305C1	300					NOHI					PSIA
247-05				CVFY BHYD LH N2H4 BTL GN2 PRESS SYS B		B46P1306C1	300					NOHI					PSIA
247-06				CVFY BHYD RH N2H4 BTL GN2 PRESS SYS A		B46P2305C1	300					NOHI					PSIA
247-07				CVFY BHYD RH N2H4 BTL GN2 PRESS SYS B		B46P2306C1	300					NOHI					PSIA
254-00				CMLT BHYD LH HYD PUMP A BYPASS VLV OPEN		B58K3020XL	ON					NOHI					PSIA
254-01				CMLT BHYD LH HPU SYSTEM A-1 START		B58K3016XL	ON										
255-00				CMLT BHYD LH APU A GG HTR 1 ON CMD		B46K3022XL	OFF										
255-01				CMLT BHYD LH APU B GG HTR 1 ON CMD		B46K3024XL	OFF										
256-00				CMLT BHYD RH HYD PUMP A BYPASS VLV OPEN		B58K4020XL	ON										
256-01				CMLT BHYD RH HPU SYSTEM A-1 START		B58K4016XL	ON										

SEQ	I	FUNC:DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
:	:	:	:	:DESIGNATOR:SINGL:	:	:	:	:	:
:	:	:CLOCK : E :	:	:	:OR LO:HIGH : UNIT :	:	:	:	:
:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:
256-01			CMLT BHYD RH APU A GG HTR 1 ON CMD	B46K4022XL OFF					
			CMLT BHYD RH APU A GG HTR 2 ON CMD	B46K4023XL OFF					
257-00			CMLT BHYD RH HYD PUMP B BYPASS VLV OPEN	B58K4021XL ON					
			CMLT BHYD RH HPU SYSTEM B-1 START	B58K4018XL ON					
257-01			CMLT BHYD RH APU B GG HTR 1 ON CMD	B46K4024XL OFF					
			CMLT BHYD RH APU B GG HTR 2 ON CMD	B46K4025XL OFF					
259-00			CMD BHYD LH HPU SYSTEM A-2 START	B58K3017XL ON					
259-01			CMD BHYD LH HPU SYSTEM B-2 START	B58K3019XL ON					
259-02			CMD BHYD RH HPU SYSTEM A-2 START	B58K4017XL ON					
259-03			CMD BHYD RH HPU SYSTEM B-2 START	B58K4019XL ON					
262-00			ACL BHYD LH APU A TURBINE SPEED 2	B46R1408C1 10.0	87.4	KRPM		2.1-12	
262-01			ACL BHYD LH APU B TURBINE SPEED 2	B46R1409C1 10.0	87.4	KRPM		2.1-12	
262-02			ACL BHYD RH APU A TURBINE SPEED 2	B46R2408C1 10.0	87.4	KRPM		2.1-12	
262-03			ACL BHYD RH APU B TURBINE SPEED 2	B46R2409C1 10.0	87.4	KRPM		2.1-12	
264-00			CMD BHYD LH HYD PUMP A BYPASS VLV OPEN	B58K302CXL OFF					
264-01			CMD BHYD LH HYD PUMP B BYPASS VLV OPEN	B58K3021XL OFF					
264-02			CMD BHYD RH HYD PUMP A BYPASS VLV OPEN	B58K4020XL OFF					
264-03			CMD BHYD RH HYD PUMP B BYPASS VLV OPEN	B58K4021XL OFF					
267-00			CMD BHYD SRB FCS/HYD VERIF FLAG	P003	ON				
267-01			CMD BHYD SRB GIMBAL PROFILE EVAL	P003	ON				
268-00			ACL BHYD LH POSITION TVC ROCK ACTUATOR	B58H1150C1 +1.88	-1.88	IN			2.1-15
268-01			ACL BHYD RH POSITION TVC TILT ACTUATOR	B58H1151C1 +1.88	-1.88	IN			
268-02			ACL BHYD LH POSITION TVC ROCK ACTUATOR	B58H2150C1 +1.88	-1.88	IN			
268-03			ACL BHYD RH POSITION TVC TILT ACTUATOR	B58H2151C1 +1.88	-1.88	IN			
269-00			CVFY BHYD LH APU A TURBINE SPEED 2	B46R1408C1 55.0	NOHI	KRPM		2.1-13	
269-01			CVFY BHYD LH APU B TURBINE SPEED 2	B46R1409C1 55.0	NOHI	KRPM		2.1-13	
269-02			CVFY BHYD RH APU A TURBINE SPEED 2	B46R2408C1 55.0	NOHI	KRPM		2.1-13	
269-03			CVFY BHYD RH APU B TURBINE SPEED 2	B46R2409C1 55.0	NOHI	KRPM		2.1-13	
273-02			CVFY BHYD LH APU A TURBINE SPEED 2	B46R1408C1 55.0	79.2	KRPM		2.1-13	
273-03			CVFY BHYD LH APU B TURBINE SPEED 2	B46R1409C1 55.0	79.2	KRPM		2.1-13	
273-04			CVFY BHYD RH APU A TURBINE SPEED 2	B46R2408C1 55.0	79.2	KRPM		2.1-13	
273-05			CVFY BHYD RH APU B TURBINE SPEED 2	B46R2409C1 55.0	79.2	KRPM		2.1-13	
274-00			CVFY BHYD LH POSITION TVC ROCK ACTUATOR	B58H1150C1 +.5	-.5	IN		TIL MENG	2.1-20
274-01			CVFY BHYD LH POSITION TVC TILT ACTUATOR	B58H1151C1 +.5	-.5	IN		TIL MENG	2.1-20
274-02			CVFY BHYD RH POSITION TVC ROCK ACTUATOR	B58H2150C1 +.5	-.5	IN		TIL MENG	2.1-20
274-03			CVFY BHYD RH POSITION TVC TILT ACTUATOR	B58H2151C1 +.5	-.5	IN		TIL MENG	2.1-20
275-00			CVFY BHYD LH PRESS HYD FLUID SUPPLY 1	B58P1303C1 2800	3363	PSIA		TIL MENG	2.1-14
275-01			CVFY BHYD LH PRESS HYD FLUID SUPPLY 2	B58P1304C1 2800	3363	PSIA		TIL MENG	2.1-14
275-02			CVFY BHYD RH PRESS HYD FLUID SUPPLY 1	B58P2303C1 2800	3363	PSIA		TIL MENG	2.1-14
275-03			CVFY BHYD RH PRESS HYD FLUID SUPPLY 2	B58P2304C1 2800	3363	PSIA		TIL MENG	2.1-14
276-00			ICL BHYD LH POSITION TVC ROCK ACTUATOR	B58H1150C1 0.00	0.00	IN			

SEQ	I	TIME	FUNC:DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
:S	:I	:CD	:T		:DESIGNATOR:SINGL	:OR LO:HIGH	:UNIT		:PALE
:S	:I	:CD	:T						
:S	:I	:CD	:T						
:S	:I	:CD	:T						

276-01	ICL	BHYD	LH	POSITION TVC TILT ACTUATOR	B58H1151C1	0.00	0.00	IN	
276-02	ICL	BHYD	RH	POSITION TVC ROCK ACTUATOR	B58H2150C1	0.00	0.00	IN	
276-03	ICL	BHYD	RH	POSITION TVC TILT ACTUATOR	B58H2151C1	0.00	0.00	IN	
278-00	ICL	BHYD	LH	RATE APU A TURBINE SPEED SNSR 2	B46R1408C1	0.00	0.00	KRPM	
278-01	ICL	BHYD	LH	RATE APU B TURBINE SPEED SNSR 2	B46R1409C1	0.00	0.00	KRPM	
278-02	ICL	BHYD	RH	RATE APU A TURBINE SPEED SNSR 2	B46R2408C1	0.00	0.00	KRPM	
278-03	ICL	BHYD	RH	RATE APU B TURBINE SPEED SNSR 2	B46R2409C1	0.00	0.00	KRPM	
279-00	VFY	BHYD	LH	DELTA PRESS SECONDARY A ROCK	B58P1311A1	-990	+990	PSID	EXIT 2.1-19
279-01	VFY	BHYD	LH	DELTA PRESS SECONDARY B ROCK	B58P1312A1	-990	+990	PSID	EXIT 2.1-19
279-02	VFY	BHYD	LH	DELTA PRESS SECONDARY C ROCK	B58P1313A1	-990	+990	PSID	EXIT 2.1-19
279-03	VFY	BHYD	LH	DELTA PRESS SECONDARY D ROCK	B58P1314A1	-990	+990	PSID	EXIT 2.1-19
279-04	VFY	BHYD	LH	DELTA PRESS SECONDARY A TILT	B58P1315A1	-990	+990	PSID	EXIT 2.1-19
279-05	VFY	BHYD	LH	DELTA PRESS SECONDARY B TILT	B58P1316A1	-990	+990	PSID	EXIT 2.1-19
279-06	VFY	BHYD	LH	DELTA PRESS SECONDARY C TILT	B58P1317A1	-990	+990	PSID	EXIT 2.1-19
279-07	VFY	BHYD	LH	DELTA PRESS SECONDARY D TILT	B58P1318A1	-990	+990	PSID	EXIT 2.1-19
279-08	VFY	BHYD	RH	DELTA PRESS SECONDARY A ROCK	B58P2311A1	-990	+990	PSID	EXIT 2.1-19
279-09	VFY	BHYD	RH	DELTA PRESS SECONDARY B ROCK	B58P2312A1	-990	+990	PSID	EXIT 2.1-19
279-10	VFY	BHYD	RH	DELTA PRESS SECONDARY C ROCK	B58P2313A1	-990	+990	PSID	EXIT 2.1-19
279-11	VFY	BHYD	RH	DELTA PRESS SECONDARY D ROCK	B58P2314A1	-990	+990	PSID	EXIT 2.1-19
279-12	VFY	BHYD	RH	DELTA PRESS SECONDARY A TILT	B58P2315A1	-990	+990	PSID	EXIT 2.1-19
279-13	VFY	BHYD	RH	DELTA PRESS SECONDARY B TILT	B58P2316A1	-990	+990	PSID	EXIT 2.1-19
279-14	VFY	BHYD	RH	DELTA PRESS SECONDARY C TILT	B58P2317A1	-990	+990	PSID	EXIT 2.1-19
279-15	VFY	BHYD	RH	DELTA PRESS SECONDARY D TILT	B58P2318A1	-990	+990	PSID	EXIT 2.1-19
519-00	ACL	BHYD	LH	RATE APU A TURBINE SPEED SNSR 2	B46R1408C1	NOLO	87.4	KRPM	
519-01	ACL	BHYD	LH	RATE APU B TURBINE SPEED SNSR 2	B46R1409C1	NOLO	87.4	KRPM	
519-02	ACL	BHYD	RH	RATE APU A TURBINE SPEED SNSR 2	B46R2408C1	NOLO	87.4	KRPM	
519-03	ACL	BHYD	RH	RATE APU B TURBINE SPEED SNSR 2	B46R2409C1	NOLO	87.4	KRPM	
520-00	CMD	BHYD	LH	HPU SYSTEM A-1 START	B58K3016XL	OFF			
520-01	CMD	BHYD	LH	HPU SYSTEM A-2 START	B58K3017XL	OFF			
520-02	CMD	BHYD	LH	HPU SYSTEM B-1 START	B58K3018XL	OFF			
520-03	CMD	BHYD	LH	HPU SYSTEM B-2 START	B58K3019XL	OFF			
520-04	CMD	BHYD	RH	HPU SYSTEM A-1 START	B58K4016XL	OFF			
520-05	CMD	BHYD	RH	HPU SYSTEM A-2 START	B58K4017XL	OFF			
520-06	CMD	BHYD	RH	HPU SYSTEM B-1 START	B58K4018XL	OFF			
520-07	CMD	BHYD	RH	HPU SYSTEM B-2 START	B58K4019XL	OFF			
520-08	CMD	BHYD	LH	HYD PUMP A BYPASS VLV OPEN	B58K3020XL	OFF			
520-09	CMD	BHYD	LH	HYD PUMP B BYPASS VLV OPEN	B58K3021XL	OFF			
520-10	CMD	BHYD	RH	HYD PUMP A BYPASS VLV OPEN	B58K4020XL	OFF			
520-11	CMD	BHYD	RH	HYD PUMP B BYPASS VLV OPEN	B58K4021XL	OFF			
591-02	CMLT	BHYD	LH	APU A GG HTR 1 ON CMD	B46K3022XL	OFF			
				LH	APU A GG HTR 2 ON CMD	B46K3023XL	OFF		

DATE 12-10-85

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI 890C5 - L

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
CD	T					DESIGNATOR	SINGL			PAGE
CLOCK	E					OR	LO:HIGH	UNIT		

591-03			CMLT	BHYD	LH	APU	B	GG	HTR	1	ON	CMD	B46K3024XL	OFF	DISPLAY					
			CMLT	BHYD	LH	APU	B	GG	HTR	2	ON	CMD	B46K3025XL	OFF	DISPLAY					
591-04			CMLT	BHYD	RH	APU	A	GG	HTR	1	ON	CMD	B46K4022XL	OFF	DISPLAY					
			CMLT	BHYD	RH	APU	A	GG	HTR	2	ON	CMD	B46K4023XL	OFF	DISPLAY					
591-05			CMLT	BHYD	RH	APU	B	GG	HTR	1	ON	CMD	B46K4024XL	OFF	DISPLAY					
			CMLT	BHYD	RH	APU	B	GG	HTR	2	ON	CMD	B46K4025XL	OFF	DISPLAY					
603-00			VFY	BHYD	LH	EVENT	APU	A	ISLN	VALVE	OPEN		B46X1851X1	OFF	DISPLAY					
603-01			VFY	BHYD	LH	EVENT	APU	A	ISLN	VALVE	CLOSED		B46X1853X1	ON	DISPLAY					
603-02			VFY	BHYD	LH	EV	APU	SEC	SP	CON	VLV	CLD	SYS	B46X1861X1	ON	DISPLAY				
603-03			VFY	BHYD	LH	EV	APU	PRI	SP	CON	VLV	OP	SYS	B46X1862X1	ON	DISPLAY				
604-00			VFY	BHYD	LH	EVENT	APU	B	ISLN	VALVE	OPEN		B46X1852X1	OFF	DISPLAY					
604-01			VFY	BHYD	LH	EVENT	APU	B	ISLN	VALVE	CLOSED		B46X1854X1	ON	DISPLAY					
604-02			VFY	BHYD	LH	EV	APU	SEC	SP	CON	VLV	CLD	SYS	B46X1863X1	ON	DISPLAY				
604-03			VFY	BHYD	LH	EV	APU	PRI	SP	CON	VLV	OP	SYS	B46X1864X1	ON	DISPLAY				
605-00			VFY	BHYD	RH	EVENT	APU	A	ISLN	VALVE	OPEN		B46X2851X1	OFF	DISPLAY					
605-01			VFY	BHYD	RH	EVENT	APU	A	ISLN	VALVE	CLOSED		B46X2853X1	ON	DISPLAY					
605-02			VFY	BHYD	RH	EV	APU	SEC	SP	CON	VLV	CLD	SYS	B46X2861X1	ON	DISPLAY				
605-03			VFY	BHYD	RH	EV	APU	PRI	SP	CON	VLV	OP	SYS	B46X2862X1	ON	DISPLAY				
606-00			VFY	BHYD	RH	EVENT	APU	B	ISLN	VALVE	OPEN		B46X2852X1	OFF	DISPLAY					
606-01			VFY	BHYD	RH	EVENT	APU	B	ISLN	VALVE	CLOSED		B46X2854X1	ON	DISPLAY					
606-02			VFY	BHYD	RH	EV	APU	SEC	SP	CON	VLV	CLD	SYS	B46X2863X1	ON	DISPLAY				
606-03			VFY	BHYD	RH	EV	APU	PRI	SP	CON	VLV	OP	SYS	B46X2864X1	ON	DISPLAY				
810-00			LABL	BHYD									P003							
811-00			CMD	BHYD	SRB	FCS/HYD	VERIF	FLAG					CMD-LS	ON						
812-00			VFY	BHYD	LH	POSITION	TVC	ROCK	ACTUATOR				B58H1150C1	-63	NOHI	IN	EXIT			
812-01			VFY	BHYD	RH	POSITION	TVC	ROCK	ACTUATOR				B58H2150C1	-63	NOHI	IN	EXIT			
812-02			VFY	BHYD	LH	POSITION	TVC	TILT	ACTUATOR				B58H1151C1	-63	NOHI	IN	EXIT			
812-03			VFY	BHYD	RH	POSITION	TVC	TILT	ACTUATOR				B58H2151C1	-63	NOHI	IN	EXIT			
813-00			VFY	BHYD	LH	POSITION	TVC	ROCK	ACTUATOR				B58H1150C1	N0L0	-63	IN	EXIT			
813-01			VFY	BHYD	RH	POSITION	TVC	ROCK	ACTUATOR				B58H2150C1	N0L0	-63	IN	EXIT			
813-02			VFY	BHYD	LH	POSITION	TVC	TILT	ACTUATOR				B58H1151C1	N0L0	-63	IN	EXIT			
813-03			VFY	BHYD	RH	POSITION	TVC	TILT	ACTUATOR				B58H2151C1	N0L0	-63	IN	EXIT			
814-00			VFY	BHYD	LH	POSITION	TVC	ROCK	ACTUATOR				B58H1150C1	-5	5	IN	EXIT			
814-01			VFY	BHYD	RH	POSITION	TVC	ROCK	ACTUATOR				B58H2150C1	-5	5	IN	EXIT			
814-02			VFY	BHYD	LH	POSITION	TVC	TILT	ACTUATOR				B58H1151C1	-5	5	IN	EXIT			
814-03			VFY	BHYD	RH	POSITION	TVC	TILT	ACTUATOR				B58H2151C1	-5	5	IN	EXIT			
042-00			CVFY	BINS	LH	PRESS	SRM	CHAMBER	A				B47P1300C1	3-8	45.5	PSIA	INHB	MSEQ		2.4-11
042-01			CVFY	BINS	LH	PRESS	SRM	CHAMBER	B				B47P1301C1	3-8	45.5	PSIA	INHB	MSEQ		2.4-11
042-02			CVFY	BINS	LH	PRESS	SRM	CHAMBER	C				B47P1302C1	3-8	45.5	PSIA	INHB	MSEQ		2.4-11
042-03			CVFY	BINS	RH	PRESS	SRM	CHAMBER	A				B47P2300C1	3-8	45.5	PSIA	INHB	MSEQ		2.4-11
042-04			CVFY	BINS	RH	PRESS	SRM	CHAMBER	B				B47P2301C1	3-8	45.5	PSIA	INHB	MSEQ		2.4-11





DATE 12-10-85 GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI 89CC5 - L

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PALE
:	CD	:	:	:	:	DESIGNATOR	SINGL	:	:	:	:
:	CLOCK	:	:	:	:	:	OR LO	:	:	:	:
:	:	:	:	:	:	:	HIGH	:	:	:	:
:	:	:	:	:	:	:	UNIT	:	:	:	:

009-34		CVFY	BPYR	LH	VOLTAGE NOZ EXT SEV PIC CAP	B55V1619C1	NOLO	1.5	V	LCC-3	2.7-5
009-35		CVFY	BPYR	RH	VOLTAGE NOZ EXT SEV PIC CAP	B55V2619C1	NOLO	1.5	V	LCC-3	2.7-5
040-00		CVFY	BPYR	LH	EVENT IGN S/A DEVICE ARMED	B55X1842X1	OFF			INHB MAPU	2.4-4
040-01		CVFY	BPYR	RH	EVENT IGN S/A DEVICE ARMED	B55X2842X1	OFF			INHB MAPU	2.4-4
040-02		CVFY	BPYR	LH	EVENT IGN S/A DEVICE SAFED	B55X1843X1	ON			INHB MAPU	2.4-5
040-03		CVFY	BPYR	RH	EVENT IGN S/A DEVICE SAFED	B55X2843X1	ON			INHB MAPU	2.4-5
040-04		CVFY	BPYR	LH	VOLTAGE IGN PIC CAP A	B55V1603C1	NOLO	1.5	V	INHB MSEQ	2.4-8
040-05		CVFY	BPYR	RH	VOLTAGE IGN PIC CAP A	B55V2603C1	NOLO	1.5	V	INHB MSEQ	2.4-8
040-06		CVFY	BPYR	LH	VOLTAGE IGN PIC CAP B	B55V1604C1	NOLO	1.5	V	INHB MSEQ	2.4-8
040-07		CVFY	BPYR	RH	VOLTAGE IGN PIC CAP B	B55V2604C1	NOLO	1.5	V	INHB MSEQ	2.4-8
040-08		CVFY	BPYR	LH	VOLTAGE FWD THR PIN PIC CAP A	B55V1605C1	NOLO	1.5	V	INHB MSEQ	2.6-4
040-09		CVFY	BPYR	RH	VOLTAGE AFT UPR BRC PIC CAP B	B55V2605C1	NOLO	1.5	V	INHB MSEQ	2.6-5
040-10		CVFY	BPYR	LH	VOLTAGE AFT MID BRC PIC CAP B	B55V1610C1	NOLO	1.5	V	INHB MSEQ	2.6-5
040-11		CVFY	BPYR	RH	VOLTAGE FWD SEP MOT PIC CAP A	B55V2613C1	NOLO	1.5	V	INHB MSEQ	2.6-6
052-04		VFY	BPYR	LH	VOLTAGE RSS BATTNO 1	B55V1625C1	26.7	32.3	V	INHB M009	2.2-14
052-06		VFY	BPYR	RH	VOLTAGE RSS BATT NO 1	B55V2625C1	26.7	32.3	V	INHB M009	2.2-14
149-00		CMD	BPYR	LH	IGNITION S/A DEVICE ARM CMD	B55K3000XL	ON			INHB MSRB	2.4-6
149-01		CMD	BPYR	RH	IGNITION S/A DEVICE ARM CMD	B55K4000XL	ON			INHB MSRB	2.4-6
151-03		CMD	BPYR	LH	IGNITION S/A DEVICE ARM CMD	B55K3000XL	OFF			INHB MPS4	2.4-7
151-04		CMD	BPYR	RH	IGNITION S/A DEVICE ARM CMD	B55K4000XL	OFF			INHB MPS4	2.4-7
153-06		CVFY	BPYR	LH	EVENT IGN S/A DEVICE ARMED	B55X1842X1	ON			INHB MSRB	2.4-6
153-07		CVFY	BPYR	RH	EVENT IGN S/A DEVICE ARMED	B55X2842X1	ON			INHB MSRB	2.4-6
153-08		VFY	BPYR	LH	EVENT IGN S/A DEVICE SAFED	B55X1843X1	OFF			INHB MPS4	2.4-7
153-09		VFY	BPYR	RH	EVENT IGN S/A DEVICE SAFED	B55X2843X1	OFF			INHB MPS4	2.4-7
506-00		CMD	BPYR	LH	IGNITION S/A DEVICE ARM CMD	B55K3000XL	OFF				
506-01		CMD	BPYR	RH	IGNITION S/A DEVICE ARM CMD	B55K4000XL	OFF				
506-02		CMD	BPYR	LH	IGNITION S/A DEVICE 1 SAFE	B55K3001XL	ON				
506-03		CMD	BPYR	RH	IGNITION S/A DEVICE 2 SAFE	B55K3002XL	ON				
506-04		CMD	BPYR	LH	IGNITION S/A DEVICE 1 SAFE	B55K4001XL	ON				
506-05		CMD	BPYR	RH	IGNITION S/A DEVICE 2 SAFE	B55K4002XL	ON				
538-02		CMD	BPYR	LH	IGNITION S/A DEVICE 1 SAFE	B55K3001XL	OFF				
538-03		CMD	BPYR	RH	IGNITION S/A DEVICE 2 SAFE	B55K3002XL	OFF				
538-04		CMD	BPYR	LH	IGNITION S/A DEVICE 1 SAFE	B55K4001XL	OFF				
538-05		CMD	BPYR	RH	IGNITION S/A DEVICE 2 SAFE	B55K4002XL	OFF				
614-00		VFY	BPYR	LH	EVENT IGN S/A DEVICE SAFED	B55X1843X1	ON			DISPLAY	
614-01		VFY	BPYR	RH	EVENT IGN S/A DEVICE SAFED	B55X2843X1	ON			DISPLAY	
615-00		VFY	BPYR	LH	VOLTAGE IGN PIC CAP A	B55V1603C1	NOLO	1.5	V	DISPLAY	
615-01		VFY	BPYR	RH	VOLTAGE IGN PIC CAP A	B55V2603C1	NOLO	1.5	V	DISPLAY	
615-02		VFY	BPYR	LH	VOLTAGE IGN PIC CAP B	B55V1604C1	NOLO	1.5	V	DISPLAY	
615-03		VFY	BPYR	RH	VOLTAGE IGN PIC CAP B	B55V2604C1	NOLO	1.5	V	DISPLAY	
018-00	ST005	VFY	BRS	LH	EV RSS DCDR A ON/CHK TONE OFF	B55X1871X1	ON			7 OF 7	

DATE 12-10-85

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI S9CC5 - L

SEQ	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
:	:	:	:	:	DESIGNATOR	:	:	:	FACE
:	CLOCK	:	:	:	:	LO	HIGH	UNIT	:
:	:	:	:	:	:	:	:	:	:

018-01	VFY	BRS	LH	EV	RSS	DCDR	B	ON/CHK	TONE	OFF	B55X1872X1	ON	7	OF	7					
018-03	VFY	BRS	RH	EV	RSS	DCDR	A	ON/CHK	TONE	OFF	B55X2871X1	ON	7	OF	7					
018-04	VFY	BRS	RH	EV	RSS	DCDR	B	ON/CHK	TONE	OFF	B55X2872X1	ON	7	OF	7					
018-05	VFY	BRS	SYS	A	ENCODER	RELAY	ENABLE	IND			GRSX2130E	OFF	7	OF	7					
018-06	VFY	BRS	SYS	B	ENCODER	RELAY	ENABLE	IND			GRSX2124E	OFF								
019-00	CVFY	BRS	LH	VOLTAGE	RSS	PIC	CAP	A			B55V1623C1	NOL0	1.5		V				2.2-16	
019-01	CVFY	BRS	LH	VOLTAGE	RSS	PIC	CAP	B			B55V1624C1	NOL0	1.5		V				2.2-16	
019-02	CVFY	BRS	RH	VOLTAGE	RSS	PIC	CAP	A			B55V2623C1	NOL0	1.5		V				2.2-16	
019-03	CMON	BRS	RH	VOLTAGE	RSS	PIC	CAP	B			B55V2624C1	NOL0	1.5		V				2.2-16	
											GRSX2100E	ON	1	OF	2					
052-00	CMON	BRS	RANGE	SAFETY	LAUNCH	PROCEED					GRSX2102E	ON								
052-01	VFY	BRS	LH	CURRENT	RSS	BATTERY	NO	1			B55C1051C1	.02	.75		AMP				2.2-19	
052-02	VFY	BRS	LH	CURRENT	RECOV	BATT					B76C105CC1	.02	.75		AMP				2.2-20	
052-03	VFY	BRS	RH	CURRENT	RSS	BATTERY	NO	1			B55C2051C1	.02	.75		AMP				2.2-19	
052-13	VFY	BRS	RH	CURRENT	RECOV	BATT					B76C2050C1	.02	.75		AMP				2.2-20	
052-14	VFY	BRS	LH	EV	RSS	DCDR	A	ON	CHK	TONE	OFF	B55X1871X1	ON						2.2-17	
052-15	VFY	BRS	LH	EV	RSS	DCDR	B	ON	CHK	TONE	OFF	B55X1872X1	ON						2.2-17	
052-16	VFY	BRS	RH	EV	RSS	DCDR	A	ON	CHK	TONE	OFF	B55X2871X1	ON						2.2-17	
052-17	VFY	BRS	RH	EV	RSS	DCDR	B	ON	CHK	TONE	OFF	B55X2872X1	ON						2.2-17	
052-18	VFY	BRS	LH	EV	RSS	ARM	CMD	FROM	DCDR	A	B55X1877X1	OFF							2.2-23	
052-19	VFY	BRS	LH	EV	RSS	ARM	CMD	FROM	DCDR	B	B55X1878X1	OFF							2.2-23	
052-20	VFY	BRS	RH	EV	RSS	ARM	CMD	FROM	DCDR	A	B55X2877X1	OFF							2.2-23	
052-21	VFY	BRS	RH	EV	RSS	ARM	CMD	FROM	DCDR	B	B55X2878X1	OFF							2.2-23	
052-22	VFY	BRS	LH	EV	RSS	FIRE	CMD	FROM	DCDR	A	B55X1879X1	OFF							2.2-25	
052-23	VFY	BRS	LH	EV	RSS	FIRE	CMD	FROM	DCDR	B	B55X1880X1	OFF							2.2-25	
052-24	VFY	BRS	RH	EV	RSS	FIRE	CMD	FROM	DCDR	A	B55X2879X1	OFF							2.2-25	
052-25	VFY	BRS	RH	EV	RSS	FIRE	CMD	FROM	DCDR	B	B55X2880X1	OFF							2.2-25	
052-26	VFY	BRS	LH	EVENT	RSS	S/A	DEVICE	ARMED			B55X1870X1	OFF							2.2-4	
052-27	VFY	BRS	LH	EVENT	RSS	S/A	DEVICE	ARMED			B55X1870X1	OFF							2.2-4	
052-28	VFY	BRS	RH	EVENT	RSS	S/A	DEVICE	ARMED			B55X1870X1	OFF							2.2-4	
052-29	VFY	BRS	RH	EVENT	RSS	S/A	DEVICE	ARMED			B55X1869X1	ON							2.2-4	
052-30	VFY	BRS	LH	EVENT	RSS	S/A	DEVICE	ARMED			B55X1869X1	ON							2.2-4	
052-31	VFY	BRS	RH	EVENT	RSS	S/A	DEVICE	ARMED			B55X2869X1	ON							2.2-4	
118-00	ACL	BRS	RSS	OK	TO	LAUNCH	IND	NO.	1		GRSX2100E									
118-01	ACL	BRS	RSS	OK	TO	LAUNCH	IND	NO.	2		GRSX2102E									
148-00	CMD	BRS	LH	RSS	S/A	DEVICE	ARM	CMD			B55K3044XL	ON								
148-01	CMD	BRS	RH	RSS	S/A	DEVICE	ARM	CMD			B55K4044XL	ON								
151-00	CMD	BRS	LH	RSS	S/A	DEVICE	ARM	CMD			B55K3044XL	OFF								
151-01	CMD	BRS	RH	RSS	S/A	DEVICE	ARM	CMD			B55K4044XL	OFF								
153-00	VFY	BRS	LH	EVENT	RSS	S/A	DEVICE	ARMED			B55X1870X1	ON								2.2-17
153-01	VFY	BRS	RH	EVENT	RSS	S/A	DEVICE	ARMED			B55X2870X1	ON								2.2-17
153-02	VFY	BRS	LH	EVENT	RSS	S/A	DEVICE	ARMED			B55X1869X1	OFF								2.2-28
153-03	VFY	BRS	RH	EVENT	RSS	S/A	DEVICE	ARMED			B55X2869X1	OFF								2.2-28

DATE 12-10-85

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI S9005 - L

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	FACE
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	DESIGNATOR	SINGL	:	:	:	:
:	:	:	:	:	:	:	:	OR	LO	HIGH	UNIT
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:

153-10	VFY	BRS	LH	CURRENT	RSS	BATTERY	NO 1	B55C1051C1	.02	.75	AMP	INHB	MPS4	2.4-19
153-11	VFY	BRS	RH	CURRENT	RSS	BATTERY	NO 1	B55C2051C1	.02	.75	AMP	INHB	MPS4	2.4-19
282-00	CMD	BRS	LH	RSS	A	INHIBIT/RESET	CMD	B55K3519E	ON					
282-01	CMD	BRS	RH	RSS	A	INHIBIT/RESET	CMD	B55K4519E	ON					
282-02	CMD	BRS	LH	RSS	B	INHIBIT/RESET	CMD	B55K3520E	ON					
282-03	CMD	BRS	RH	RSS	B	INHIBIT/RESET	CMD	B55K4520E	ON					
284-00	IGL	BRS		INHIBIT	GOAL	NOTIFICATION		GRSX2100E	*					
284-01	IGL	BRS		INHIBIT	GOAL	NOTIFICATION		GRSX2102E	*					
322-00	CRSY	BRS	RANGE	SAFETY	LAUNCH	PROCEED		GRSX2100E						
322-01	CRSY	BRS	RANGE	SAFETY	LAUNCH	PROCEED		GRSX2102E						
517-00	CMD	BRS	LH	RSS	A	INHIBIT/RESET	CMD	B55K3519E	OFF					
517-01	CMD	BRS	RH	RSS	A	INHIBIT/RESET	CMD	B55K4519E	OFF					
517-02	CMD	BRS	LH	RSS	B	INHIBIT/RESET	CMD	B55K3520E	OFF					
517-03	CMD	BRS	RH	RSS	B	INHIBIT/RESET	CMD	B55K4520E	OFF					
517-04	CMD	BRS	ET	RSS	INHIBIT/RESET	CMD		T55K30C1E	OFF					
530-00	CMD	BRS	LH	RSS	S/A	DEVICE	ARM	CMD	B55K3044XL	OFF				
530-01	CMD	BRS	RH	RSS	S/A	DEVICE	ARM	CMD	B55K4044XL	OFF				
602-02	VFY	BRS	LH	RSS	A	INHIBIT/RESET	IND	B55X1881X1	ON			DISPLAY		
602-03	VFY	BRS	LH	RSS	B	INHIBIT/RESET	IND	B55X1882X1	ON			DISPLAY		
602-04	VFY	BRS	RH	RSS	A	INHIBIT/RESET	IND	B55X2881X1	ON			DISPLAY		
602-05	VFY	BRS	RH	RSS	B	INHIBIT/RESET	IND	B55X2882X1	ON			DISPLAY		
651-00	CMD	BRS	LH	RSS	S/A	DEVICE	ARM	CMD	B55K3044XL	OFF				
651-01	CMD	BRS	RH	RSS	S/A	DEVICE	ARM	CMD	B55K4044XL	OFF				
652-00	CMD	BRS	SPEC	100	PRO			DEU 1						
652-01	CMD	BRS	ITEM	25	EXECUTE			DEU 1						
652-02	VFY	BRS	MEC	INHIB/ENABLE	IND			V91X1491XX	ON			GTO	ST510	
653-00	ISSU	BRS	MEC1	LH	RSS	SAFE	1 (ISSUE FD)	V76K7508BL	ON					
653-01	ISSU	BRS	MEC1	RH	RSS	SAFE	2 (ISSUE FD)	V76K7509BL	ON					
653-02	ISSU	BRS	MEC2	LH	RSS	SAFE	2 (ISSUE FD)	V76K7609BL	ON					
653-03	ISSU	BRS	MEC2	RH	RSS	SAFE	1 (ISSUE FD)	V76K7608BL	ON					
654-00	CMD	BRS	ITEM	26	EXECUTE			DEU 1						
655-00	VFY	BRS	MEC	INHIB/ENABLE	IND			V91X1491XX	OFF			GTO	ST520	
656-00	CMD	BRS	RESUME					DEL 1						
656-01	CMD	BRS	READ	MEC	PREFLIGHT	BITE		MEC 1						
656-02	CMD	BRS	READ	MEC	PREFLIGHT	BITE		MEC 2						
656-03	CMD	BRS	MEC	MASTER	RESET			MEC 1						
656-04	CMD	BRS	MEC	MASTER	RESET			MEC 2						
657-00	VFY	BRS	LH	RSS	S/A	DEVICE	ARMED	IND	B55X1870X1	OFF		DISPLAY		
657-01	VFY	BRS	RH	RSS	S/A	DEVICE	ARMED	IND	B55X2870X1	OFF		DISPLAY		
657-02	VFY	BRS	LH	RSS	S/A	DEVICE	SAFED	IND	B55X1869X1	ON		DISPLAY		
657-03	VFY	BRS	RH	RSS	S/A	DEVICE	SAFED	IND	B55X2869X1	ON		DISPLAY		

SEQ	TIME	I	FUNC	DISC	NONENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
:	CD	:	:	:	:	DESIGNATOR	:	:	:	PAGE
:	CLOCK	:	:	:	:	OR LO	:	:	:	:
:	:	:	:	:	:	HIGH	:	:	:	:
:	:	:	:	:	:	UNIT	:	:	:	:
112-46			ICL	BYHD	RH TEMP GAS GENERATOR BED SYS B	B46T2504C1				
040-12		K	CVFY	CEPDC	RBUS SYSA PIC CAP VOLTS	GMSV5503A	NOLO 1.5	V	1 OF 2	
040-13		K	CVFY	CEPDC	RBUS SYSA PIC CAP VOLTS	GMSV7503A	NOLO 1.5	V	INHB MLH2	
040-14		K	CVFY	CEPDC	RBUS SYSB PIC CAP VOLTS	GMSV6503A	NOLO 1.5	V	1 OF 2	
040-15		K	CVFY	CEPDC	RBUS SYSB PIC CAP VOLTS	GMSV8503A	NOLO 1.5	V	INHB MLH2	
231-06		K	CVFY	CEPDC	RBUS SYSA PIC CAP VOLTS	GMSV5503A	35.7 NOHI	V	1 OF 2	
231-07		K	CVFY	CEPDC	RBUS SYSA PIC CAP VOLTS	GMSV7503A	35.7 NOHI	V	INHB MSRB	
231-08		K	CVFY	CEPDC	RBUS SYSB PIC CAP VOLTS	GMSV6503A	35.7 NOHI	V	1 OF 2	
231-09		K	CVFY	CEPDC	RBUS SYSB PIC CAP VOLTS	GMSV8503A	35.7 NOHI	V	INHB MSRB	
618-44		K	VFY	CEPDC	RBUS SYSA PIC CAP VOLTS	GMSV5503A	NOLO 1.5	V	DISPLAY	
618-45		K	VFY	CEPDC	RBUS SYSA PIC CAP VOLTS	GMSV7503A	NOLO 1.5	V	DISPLAY	
618-46		K	VFY	CEPDC	RBUS SYSB PIC CAP VOLTS	GMSV6503A	NOLO 1.5	V	DISPLAY	
618-47		K	VFY	CEPDC	RBUS SYSB PIC CAP VOLTS	GMSV8503A	NOLO 1.5	V	DISPLAY	
046-15		K	CVFY	CINTG	GCS QUALIFIER BIT - PRI	GCMX3003E	NONO 1.5	V	3 OF 3	
046-16		K	CVFY	CINTG	CCE GO FLAG - PRI	GCMX3143E	ON 3 OF 3			
046-17		K	CVFY	CINTG	CCE NO-GO FLAG - PRI	GCMX3153E	OFF OR			
046-18		K	CVFY	CINTG	GCS QUALIFIER BIT - SEC	GCMX3503E	ON 3 OF 3			
046-19		K	CVFY	CINTG	CCE GO FLAG - SEC	GCMX3643E	ON 3 OF 3			
046-20		K	CVFY	CINTG	CCE NO-GO FLAG - SEC	GCMX3653E	OFF INHB MSRB			
199-05		K	CMD	CINTG	CCE START CU CCLS TERMINAL SEQ - PRI	GCMX3121E	ON			
199-06		K	CMD	CINTG	CCE START CU CCLS TERMINAL SEQ - SEC	GCMX3621E	ON			
218-00		K	CMD	CINTG	CCE T-1/57 AND COUNTING - PRI	GCMX3131E	ON			
218-01		K	CMD	CINTG	CCE T-1/57 AND COUNTING - SEC	GCMX3631E	ON			
218-01		K	VFY	CINTG	CCE FLIGHT PRESS OK - PRI	GCMX3123E	ON 1 OF 2			
251-01		K	VFY	CINTG	CCE FLIGHT PRESS OK - SEC	GCMX3623E	ON INHB MSEQ			
251-02		K	CMD	CINTG	CCE T-31 SEC AND COUNTING - PRI	GCMX3111E	ON			
252-08		K	CMD	CINTG	CCE T-31 SEC AND COUNTING - SEC	GCMX3611E	ON			
252-09		K	CMD	CINTG	CCE START CU CCLS TERMINAL SEQ - PRI	GCMX3121E	OFF			
320-18		K	CMD	CINTG	CCE START CU CCLS TERMINAL SEQ - SEC	GCMX3621E	OFF			
320-19		K	CMD	CINTG	CCE T-1/57 AND COUNTING - PRI	GCMX3131E	OFF			
320-20		K	CMD	CINTG	CCE T-1/57 AND COUNTING - SEC	GCMX3631E	OFF			
320-21		K	CMD	CINTG	CCE T-31 SEC AND COUNTING - PRI	GCMX3111E	OFF			
320-22		K	CMD	CINTG	CCE T-31 SEC AND COUNTING - SEC	GCMX3611E	OFF			
320-23		K	CMD	CINTG	CCE T-31 SEC AND COUNTING - PRI	GCMX3051E	OFF			
320-24		K	CMD	CINTG	GO FOR CCE PRESSURIZATION - SEC	GCMX3551E	OFF			PL
320-25		K	CMD	CINTG	GO FOR CCE PRESSURIZATION - PRI	GCMX3081E	ON			PL
501-02		K	CMD	CINTG	GLS BREAKOUT FLAG - PRI	GCMX3581E	ON			
501-03		K	CMD	CINTG	GLS BREAKOUT FLAG - SEC	G017				
717-00		K	LABL	CINTG						
717-01		K	VFY	CINTG	MANUAL HOLD	N03IS048E	ON			GTO ST10
717-02		K	VFY	CINTG	IC HOLD/RESUME	N03IS347D	0			GTO ST10
717-03		K	VFY	CINTG	MILESTONES		ON			GTO ST10





SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
:	CD	T	:	:	:	:	:	:	:	:
:	CLOCK	E	:	:	:	DESIGNATOR	SINGL	:	:	PAGE
:	:	:	:	:	:	:	OR	LO	HIGH	UNIT
:	:	:	:	:	:	:	:	:	:	:
717-04	K	CMD	CINTG	GO	FOR CCE PRESSURIZATION - PRI	GCNK3051E	ON			PL
717-05	K	CMD	CINTG	GO	FOR CCE PRESSURIZATION - SEC	GCNK3551E	ON			PL
717-06	K	MSG	CINTG	CENTAUR	PRESS CMD SENT					
199-07	K	CMD	CMPS	CCE	GOX VENT HTR CNTL ENABLE - PRI	GCNK4011E	OFF			
199-08	K	CMD	CMPS	CCE	GOX VENT HTR DC MOD ON - PRI	GCNK6031E	OFF			
199-09	K	CMD	CMPS	CCE	GOX VENT HIR DC MOD OFF - PRI	GCNK6030E	ON			
199-10	K	CMD	CMPS	CCE	GOX VENT HTR CNTL ENABLE - SEC	GCNK4511E	OFF			
199-11	K	CMD	CMPS	CCE	GOX VENT HTR DC MOD ON - SEC	GCNK6531E	OFF			
199-12	K	CMD	CMPS	CCE	GOX VENT HTR DC MOD OFF - SEC	GCNK6530E	ON			
320-16	K	CMD	CMPS	CCE	GOX VENT HTR DC MOD OFF - PRI	GCNK603CE	OFF			
320-17	K	CMD	CMPS	CCE	GOX VENT HTR DC MOD OFF - SEC	GCNK6530E	OFF			
568-05	K	CMD	CMPS	CCE	GOX VENT HIR CNTL ENABLE - PRI	GCNK4011E	ON			
568-06	K	CMD	CMPS	CCE	GOX VENT HTR DC MOD ON - PRI	GCNK6031E	ON			
568-07	K	CMD	CMPS	CCE	GOX VENT HTR DC MOD OFF - PRI	GCNK6030E	OFF			
568-08	K	CMD	CMPS	CCE	GOX VENT HTR CNTL ENABLE - SEC	GCNK4511E	ON			
568-09	K	CMD	CMPS	CCE	GOX VENT HTR DC MOD ON - SEC	GCNK6531E	ON			
568-10	K	CMD	CMPS	CCE	GOX VENT HTR DC MOD OFF - SEC	GCNK6530E	OFF			
011-00	K	CVFY	COMM	NSP	1 - FRAME SYNC LOCK	V74X5176E1	ON	1 OF 2		6.9.5-7
011-01	K	CVFY	COMM	NSP	2 - FRAME SYNC LOCK	V74X5177E1	ON	LCC-3		6.9.5-7
011-02	K	CVFY	COMM	GCIL	ACTIVE	V74X5052E1	ON	1 OF 3		6.9.5-6
011-03	K	CVFY	COMM	GCIL	POWER SUPPLY 1 ON	V74X4730E1	ON	1 OF 3		6.9.5-6
011-04	K	CVFY	COMM	GCIL	POWER SUPPLY 2 ON	V74X4731E1	ON	LCC-3		6.9.5-6
583-00	K	VFY	CPVD	L	PB VENT 6 PURGE 2 IND 1	V59X3705X1	OFF	1 OF 4		
583-01	K	VFY	CPVD	L	PB VENT 6 PURGE 2 IND 2	V59X3715X1	OFF	1 OF 4		
583-02	K	VFY	CPVD	R	PB VENT 6 PURGE 2 IND 1	V59X4705X1	OFF	1 OF 4		
583-03	K	VFY	CPVD	R	PB VENT 6 PURGE 2 IND 2	V59X4715X1	OFF	1 OF 4		
583-04	K	CMD	CPVD	PREREQUISITE	CONTROL LOGIC	NECK9911X	OFF	1 OF 4		
583-05	K	CMD	CPVD	L	PB VENT 6 PURGE 2 CMD 1A	V59K3700XL	ON	610 ST410		
583-06	K	CMD	CPVD	L	PB VENT 6 PURGE 2 CMD 1B	V59K3701XL	ON			
583-07	K	CMD	CPVD	L	PB VENT 6 PURGE 2 CMD 2A	V59K3710XL	ON			
583-08	K	CMD	CPVD	L	PB VENT 6 PURGE 2 CMD 2B	V59K3711XL	ON			
583-09	K	CMD	CPVD	R	PB VENT 6 PURGE 2 CMD 1A	V59K4700XL	ON			
583-10	K	CMD	CPVD	R	PB VENT 6 PURGE 2 CMD 1B	V59K4701XL	ON			
583-11	K	CMD	CPVD	R	PB VENT 6 PURGE 2 CMD 2A	V59K4710XL	ON			
583-12	K	CMD	CPVD	R	PB VENT 6 PURGE 2 CMD 2B	V59K4711XL	ON			
594-00	K	CMD	CPVD	PREREQUISITE	CONTROL LOGIC	NECK9911X	OFF			
594-01	K	CMD	CPVD	L	PB VENT 6 PURGE 2 CMD 1A	V59K3700XL	OFF			PL
594-02	K	CMD	CPVD	L	PB VENT 6 PURGE 2 CMD 1B	V59K3701XL	OFF			PL
594-03	K	CMD	CPVD	L	PB VENT 6 PURGE 2 CMD 2A	V59K3710XL	OFF			PL
594-04	K	CMD	CPVD	L	PB VENT 6 PURGE 2 CMD 2B	V59K3711XL	OFF			PL
594-05	K	CMD	CPVD	R	PB VENT 6 PURGE 2 CMD 1A	V59K4700XL	OFF			PL



SEQ	TIME	CD	CLOCK	FUNCTION	DESIGNATOR	SINGL	OR	LO	HIGH	UNIT	VALUE	ELSE	DURATION	LCC	PAGE	PL
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594-06	K	CMD	CPVD	R	PB	VENT	6	PURGE	2	CMD	1B					PL
594-07	K	CMD	CPVD	R	PB	VENT	6	PURGE	2	CMD	2A					PL
594-08	K	CMD	CPVD	R	PB	VENT	6	PURGE	2	CMD	2B					PL
008-00		CVFY	DPS		GPC	1	FAIL					LCC-4			6.9.3-3	
008-01		CVFY	DPS		GPC	2	FAIL					LCC-4			6.9.3-3	
008-02		CVFY	DPS		GPC	3	FAIL					LCC-4			6.9.3-3	
008-03		CVFY	DPS		GPC	4	FAIL					LCC-4			6.9.3-3	
008-04		CVFY	DPS		GPC	5	FAIL					LCC-4			6.9.24-12	
008-05		CVFY	DPS		FF1	INPUT	PROM	SEQ	1/2	BYP	(MFE)	LCC-3			6.9.3-5	
008-06		CVFY	DPS		FF2	INPUT	PROM	SEQ	1/2	BYP	(MFE)	LCC-3			6.9.3-5	
008-07		CVFY	DPS		FF3	INPUT	PROM	SEQ	1/2	BYP	(MFE)	LCC-3			6.9.3-5	
008-08		CVFY	DPS		FF4	INPUT	PROM	SEQ	1/2	BYP	(HFE)	LCC-3			6.9.3-5	
008-09		CVFY	DPS		FF1	INPUT	PROM	SEQ	2/6	BYPASS		LCC-3			6.9.3-5	
008-10		CVFY	DPS		FF2	INPUT	PROM	SEQ	2/6	BYPASS		LCC-3			6.9.3-5	
008-11		CVFY	DPS		FF3	INPUT	PROM	SEQ	2/6	BYPASS		LCC-3			6.9.3-5	
008-12		CVFY	DPS		FF4	INPUT	PROM	SEQ	2/6	BYPASS		LCC-3			6.9.3-5	
008-13		CVFY	DPS		FF1	TACAN/RA	BYPASS					LCC-3			6.9.3-5	
008-14		CVFY	DPS		FF2	TACAN/RA	BYPASS					LCC-3			6.9.3-5	
008-15		CVFY	DPS		FF3	TACAN/RA	BYPASS					LCC-3			6.9.3-5	
008-16		CVFY	DPS		FF1	ADTA	BYPASS					LCC-3			6.9.3-5	
008-17		CVFY	DPS		FF2	ADTA	BYPASS					LCC-3			6.9.3-5	
008-18		CVFY	DPS		FF3	ADTA	BYPASS					LCC-3			6.9.3-5	
008-19		CVFY	DPS		FF4	ADTA	BYPASS					LCC-3			6.9.3-5	
008-20		CVFY	DPS		FF1	MTU	BYPASS					LCC-3			6.9.3-5	
008-21		CVFY	DPS		FF2	MTU	BYPASS					2 OF 3			6.9.3-5	
008-22		CVFY	DPS		FF3	MTU	BYPASS					LCC-3			6.9.3-5	
008-23		CVFY	DPS		FA1	INPUT	PROM	SEQ	1/2	BYP	(MFE)	LCC-3			6.9.3-5	
008-24		CVFY	DPS		FA2	INPUT	PROM	SEQ	1/2	BYP	(MFE)	LCC-3			6.9.3-5	
008-25		CVFY	DPS		FA3	INPUT	PROM	SEQ	1/2	BYP	(MFE)	LCC-3			6.9.3-5	
008-26		CVFY	DPS		FA4	INPUT	PROM	SEQ	1/2	BYP	(MFE)	LCC-3			6.9.3-5	
008-27		CVFY	DPS		FA1	INPUT	PROM	SEQ3-10	BYPASS	(HF)		LCC-3			6.9.3-5	
008-28		CVFY	DPS		FA2	INPUT	PROM	SEQ3-10	BYPASS	(HF)		LCC-3			6.9.3-5	
008-29		CVFY	DPS		FA3	INPUT	PROM	SEQ3-10	BYPASS	(HF)		LCC-3			6.9.3-5	
008-30		CVFY	DPS		FA4	INPUT	PROM	SEQ3-10	BYPASS	(HF)		LCC-3			6.9.3-5	
008-31		CVFY	DPS		LL1/P1-P2	SRB	PROM	BYPASS	(SRB)			LCC-4			2.3-14	
008-32		CVFY	DPS		LL2/P1-P2	SRB	PROM	BYPASS	(SRB)			LCC-4			2.3-14	
008-33		CVFY	DPS		LR1/P1-P2	SRB	PROM	BYPASS	(SRB)			LCC-4			2.3-14	
008-34		CVFY	DPS		LR2/P1-P2	SRB	PROM	BYPASS	(SRB)			LCC-4			2.3-14	
008-35		CVFY	DPS		FF1	NSP	DISCRETES	BYPASS				LCC-3			6.9.3-5	
008-36		CVFY	DPS		FF3	NSP	DISCRETES	BYPASS				LCC-3			6.9.3-5	
008-37		CVFY	DPS		FF1	NSP	DATA	BYPASS				1 OF 2			6.9.3-5	

: SEQ : I : TIME : I : FUNC : DISC : : Nomenclature : : FUNCTION : : ELSE : : DURATION : : : S :  
 : CD : T : : : : : : : : : : : : : : : : S :  
 : S :  
 : F :  
 : D :

SEQ	I	TIME	I	FUNC	DISC	Nomenclature	FUNCTION	ELSE	DURATION	S
008-38				CVFY	DPS	FF3 NSP DATA BYPASS	V91X2903XX OFF	LCC-3		6.9.3-5
008-39				CVFY	DPS	FF1 MDM RETURN WORD BYPASS(HFE)	V91X2904XX OFF	LCC-3		6.9.3-6
008-40				CVFY	DPS	FF2 MDM RETURN WORD BYPASS(HFE)	V91X2905XX OFF	LCC-3		6.9.3-6
008-41				CVFY	DPS	FF3 MDM RETURN WORD BYPASS(HFE)	V91X2906XX OFF	LCC-3		6.9.3-6
008-42				CVFY	DPS	FF4 MDM RETURN WORD BYPASS(HFE)	V91X2907XX OFF	LCC-3		6.9.3-6
008-43				CVFY	DPS	FA2 HYDR SYS PRESS C BYPASS	V91X2917XX OFF	LCC-3		6.9.3-6
008-44				CVFY	DPS	FA3 OMS CHAMBER PRESS LEFT BYPAS	V91X2918XX OFF	LCC-3		6.9.3-6
008-45				CVFY	DPS	FA4 OMS CHAMBER PRESS RIGHT BYP	V91X2919XX OFF	LCC-3		6.9.3-6
008-46				CVFY	DPS	FA1 MDM RETURN WORD BYPASS(HFE)	V91X2920XX OFF	LCC-3		6.9.3-6
008-47				CVFY	DPS	FA2 MDM RETURN WORD BYPASS(HFE)	V91X2921XX OFF	LCC-3		6.9.3-6
008-48				CVFY	DPS	FA3 MDM RETURN WORD BYPASS(HFE)	V91X2922XX OFF	LCC-3		6.9.3-6
008-49				CVFY	DPS	FA4 MDM RETURN WORD BYPASS(HFE)	V91X2923XX OFF	LCC-3		6.9.3-6
008-50				CVFY	DPS	FF1 IMU DSCRS BYPASS (IMU INPUT)	V91X2924XX OFF	LCC-3		6.9.3-6
008-51				CVFY	DPS	FF2 IMU DSCRS BYPASS (IMU INPUT)	V91X2925XX OFF	LCC-3		6.9.3-6
008-52				CVFY	DPS	FF3 IMU DSCRS BYPASS (IMU INPUT)	V91X2926XX OFF	LCC-3		6.9.3-6
008-53				CVFY	DPS	EIU1/P1 DATA BYPASS (HFE INPUT)	V91X2928XX OFF	LCC-3		6.9.3-6
008-54				CVFY	DPS	EIU2/P1 DATA BYPASS (HFE INPUT)	V91X2931XX OFF	LCC-3		6.9.3-6
008-55				CVFY	DPS	EIU3/P1 DATA BYPASS (HFE INPUT)	V91X2934XX OFF	LCC-3		6.9.3-6
008-58				CVFY	DPS	GPC 1 TIME SOURCE GPC/MTU	V91X1716XX ON	LCC-3		6.9.3-6
008-59				CVFY	DPS	GPC 2 TIME SOURCE GPC/MTU	V91X1717XX ON	LCC-3		6.9.3-6
008-60				CVFY	DPS	GPC 3 TIME SOURCE GPC/MTU	V91X1718XX ON	LCC-3		6.9.3-6
008-61				CVFY	DPS	GPC 4 TIME SOURCE GPC/MTU	V91X1719XX ON	LCC-3		6.9.3-6
008-62				CVFY	DPS	GPC 1 TMP SOURCE	B010	LCC-3		6.9.3-6
008-63				CVFY	DPS	GPC 2 TMP SOURCE	B010	LCC-3		6.9.3-6
008-64				CVFY	DPS	GPC 3 TMP SOURCE	B010	LCC-3		6.9.3-6
008-65				CVFY	DPS	GPC 4 TMP SOURCE	B010	LCC-3		6.9.3-6
008-66				CVFY	DPS	DEU #1 BITE STATUS PRESENT B14		LCC-3		6.9.3-10
008-67				CVFY	DPS	DEU #2 BITE STATUS PRESENT B14		LCC-3		6.9.3-10
008-68				CVFY	DPS	GPC1 MMU1 READY		LCC-3		6.9.3-10
008-69				CVFY	DPS	GPC2 MMU1 READY		LCC-3		6.9.3-10
008-70				CVFY	DPS	GPC3 MMU1 READY		LCC-3		6.9.3-10
008-71				CVFY	DPS	GPC4 MMU1 READY		LCC-3		6.9.3-10
008-72				CVFY	DPS	GPC1 MMU2 READY		LCC-3		6.9.3-10
008-73				CVFY	DPS	GPC2 MMU2 READY		LCC-3		6.9.3-10
008-74				CVFY	DPS	GPC3 MMU2 READY		LCC-3		6.9.3-10
008-75				CVFY	DPS	GPC4 MMU2 READY		LCC-3		6.9.3-10
008-76				CVFY	DPS	GPC1 MMU1 IPL SELECT		LCC-3		6.9.3-11
008-77				CVFY	DPS	GPC2 MMU1 IPL SELECT		LCC-3		6.9.3-11
008-78				CVFY	DPS	GPC3 MMU1 IPL SELECT		LCC-3		6.9.3-11
008-79				CVFY	DPS	GPC4 MMU1 IPL SELECT		LCC-3		6.9.3-11
008-80				CVFY	DPS	GPC1 MMU2 IPL SELECT		LCC-3		6.9.3-11

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI S9CC5 - L

DATE 12-10-85

SEQ	I	FUNC	DISC	NOMENCLATURE	FUNCTION	ELSE	DURATION	LCC
:S	:	:	:	:	:	:	:	:
:TIME	:I	:FUNC	:DISC	:	:FUNCTION	:	:DURATION	:LCC
:CD	:T	:	:	:	:DESIGNATOR	:	:	:PAGE
:CLOCK	:E	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	OR LO:HIGH	:	:	:
:	:	:	:	:	UNIT	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	VALUE	:	:	:

008-81	CVFY	DPS		GPC2 MMU2 IPL SELECT	V92X7427XX OFF	2 OF 4		6.9.3-11
008-82	CVFY	DPS		GPC3 MMU2 IPL SELECT	V92X7487XX OFF	2 OF 4		6.9.3-11
008-83	CVFY	DPS		GPC4 MMU2 IPL SELECT	V92X7547XX OFF	LCC-3		6.9.3-11
035-00	CVFY	DPS		PASS FSM OR BFS GPC ERR	N039INTGR OFF	CPER G012 TIL MENG		6.9.3-2
035-01	CVFY	DPS		BFS TRKG F/C 1	V98X2752X1 ON	INHB MENG		6.9.24-9
035-02	CVFY	DPS		BFS TRKG F/C 2	V98X2753X1 ON	INHB MENG		6.9.24-9
035-03	CVFY	DPS		BFS TRKG F/C 3	V98X2754X1 ON	INHB MENG		6.9.24-9
035-04	CVFY	DPS		BFS TRKG F/C 4	V98X2755X1 ON	INHB MENG		6.9.24-9
035-05	CVFY	DPS		BFS TERM B	V98X0594X1 ON	INHB MENG		6.9.24-2
035-06	CVFY	DPS		BFS ENGAGE 1	V98X0604X1 OFF	INHB MENG		6.9.24-3
035-07	CVFY	DPS		BFS ENGAGE 2	V98X0605X1 OFF	INHB MENG		6.9.24-3
035-08	CVFY	DPS		BFS ENGAGE 3	V98X0606X1 OFF	INHB MENG		6.9.24-3
035-09	CVFY	DPS		LH DDU PWR SUPPLY A GOOD	V73X3001X1 ON	INHB M009		6.9.10-35
035-10	CVFY	DPS		LH DDU PWR SUPPLY B GOOD	V73X3002X1 ON	INHB M009		6.9.10-35
035-11	CVFY	DPS		LH DDU PWR SUPPLY C GOOD	V73X3003X1 ON	INHB M009		6.9.10-35
035-12	CVFY	DPS		RH DDU PWR SUPPLY A GOOD	V73X3011X1 ON	INHB M009		6.9.10-35
035-13	CVFY	DPS		RH DDU PWR SUPPLY B GOOD	V73X3012X1 ON	INHB M009		6.9.10-35
035-14	CVFY	DPS		RH DDU PWR SUPPLY C GOOD	V73X3013X1 ON	INHB M009		6.9.10-35
035-15	CVFY	DPS		FF1 IMU BYPASS	V91X2273XX OFF	INHB MSEQ		6.9.3-5
035-16	CVFY	DPS		FF2 IMU BYPASS	V91X2274XX OFF	INHB MSEQ		6.9.3-5
035-17	CVFY	DPS		FF3 IMU BYPASS	V91X2275XX OFF	INHB MSEQ		6.9.3-5
035-18	CVFY	DPS		EIU1/P4 DATA BYP (HFE INPUT)	V91X2813XX OFF	INHB MSEQ		6.9.3-5
035-19	CVFY	DPS		EIU2/P4 DATA BYP (HFE INPUT)	V91X2817XX OFF	INHB MSEQ		6.9.3-5
035-20	CVFY	DPS		EIU3/P4 DATA BYP (HFE INPUT)	V91X2821XX OFF	INHB MSEQ		6.9.3-5
035-21	CVFY	DPS		EIU1/P1 DATA BYPASS (HFE INPUT)	V91X2927XX OFF	INHB MSEQ		6.9.3-6
035-22	CVFY	DPS		EIU2/P1 DATA BYPASS (HFE INPUT)	V91X2930XX OFF	INHB MSEQ		6.9.3-6
035-23	CVFY	DPS		EIU3/P1 DATA BYPASS (HFE INPUT)	V91X2933XX OFF	INHB MSEQ		6.9.3-6
035-24	CVFY	DPS		MTU ACCUMULATOR SOURCE	V98J0615C1 B001	CPER G005 TIL MSEQ		6.9.24-4
035-25	CVFY	DPS		PAYLOAD 1B PF1	V98X0961X1 OFF	INHB MSEQ		6.9.24-13
035-26	CVFY	DPS		PAYLOAD 1B PF2	V98X0965X1 OFF	INHB MSEQ		6.9.24-13
233-00	CVFY	DPS		AS5X ASC DAP 1ST CYCLE	V98X3514X1 ON	INHB MSEQ		6.9.24-10
291-00	CMD	DPS		FWD CMD DCDR LF01 PWR SPLY 1	V72K7968W OFF			
291-01	CMD	DPS		FWD CMD DCDR LF01 PWR SPLY 2	V72K7969W OFF			
295-00	CMD	DPS		AFT CMD DCDR LA01 PWR SPLY 1	V72K7965W OFF			
295-01	CMD	DPS		AFT CMD DCDR LA01 PWR SPLY 2	V72K7966W OFF			
503-00	CMD	DPS		AFT CMD DCDR LA01 PWR SPLY 1	V72K7965W ON			
503-01	CMD	DPS		AFT CMD DCDR LA01 PWR SPLY 2	V72K7966W ON			
504-00	CMD	DPS		FWD CMD DCDR LF01 PWR SPLY 1	V72K7968W ON			
504-01	CMD	DPS		FWD CMD DCDR LF01 PWR SPLY 2	V72K7969W ON			
601-00	VFY	DPS	ST430	HRS MDM LA1 PF BUS 1	V72K7965WR ON	DISPLAY		
601-01	VFY	DPS		HRS MDM LA1 PF BUS 2	V72K7966WR ON	DISPLAY		

SEQ	TIME	I	FUNC	DISC	NONENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
:	:	:	:	:	:	:	:	:	:	:
:	CD	T	:	:	:	DESIGNATOR	SINGL	:	:	PAGE
:	CLOCK	E	:	:	:	:	OR	LO	HIGH	UNIT
:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:
601-02	VFY	DPS	HRS	MDM	LF1	PF	BUS	1		DISPLAY
601-03	VFY	DPS	HRS	MDM	LF1	PF	BUS	2		DISPLAY
701-01	VFY	DPS	FA1	INPUT	PROM	SEQ3-10	BYPASS	(HF)		DISPLAY
701-02	VFY	DPS	FA2	INPUT	PROM	SEQ3-10	BYPASS	(HF)		DISPLAY
701-03	VFY	DPS	FA3	INPUT	PROM	SEQ3-10	BYPASS	(HF)		DISPLAY
701-04	VFY	DPS	FA4	INPUT	PROM	SEQ3-10	BYPASS	(HF)		DISPLAY
701-05	VFY	DPS	FF1	MDM	RETURN	WORD	BYPASS	(HFE)		DISPLAY
701-06	VFY	DPS	FF2	MDM	RETURN	WORD	BYPASS	(HFE)		DISPLAY
701-07	VFY	DPS	FF3	MDM	RETURN	WORD	BYPASS	(HFE)		DISPLAY
701-08	VFY	DPS	FF4	MDM	RETURN	WORD	BYPASS	(HFE)		DISPLAY
701-09	VFY	DPS	FLT	CRITICAL	MDM	HOLD	ABORT			DISPLAY
705-01	VFY	DPS	MTU	ACCUMULATOR	SOURCE		B011			INHB MSEQ END G005
705-02	CVFY	DPS	MTU	ACCUMULATOR	SOURCE		B011			CPER G005 TIL MSEQ
712-03	ST10		FSP	MSG	1	MAJOR	ID			GTO ST12
712-04	VFY	DPS	FSP	MSG	1	MINOR	ID			GTO ST12
712-05	VFY	DPS	FSP	MSG	1	MAJOR	ID			GTO ST14
712-06	VFY	DPS	FSP	MSG	1	MINOR	ID			GTO ST14
712-07	ST14		FSP	MSG	1	MINOR	ID			GTO ST20
712-08	VFY	DPS	FSP	MSG	2	MAJOR	ID			GTO ST22
712-09	VFY	DPS	FSP	MSG	2	MINOR	ID			GTO ST22
712-10	VFY	DPS	FSP	MSG	2	MAJOR	ID			GTO ST30
712-11	VFY	DPS	FSP	MSG	2	MINOR	ID			GTO ST30
712-12	ST24		FSP	MSG	2	MINOR	ID			GTO ST34
712-13	ST30		FSP	MSG	3	MAJOR	ID			GTO ST32
712-14	VFY	DPS	FSP	MSG	3	MINOR	ID			GTO ST32
712-15	VFY	DPS	FSP	MSG	3	MAJOR	ID			GTO ST40
712-16	VFY	DPS	FSP	MSG	3	MINOR	ID			GTO ST34
712-17	VFY	DPS	FSP	MSG	3	MINOR	ID			GTO ST40
712-18	VFY	DPS	FSP	MSG	4	MAJOR	ID			GTO ST42
712-19	VFY	DPS	FSP	MSG	4	MINOR	ID			GTO ST42
712-20	ST42		FSP	MSG	4	MINOR	ID			GTO ST50
712-21	VFY	DPS	FSP	MSG	4	MAJOR	ID			GTO ST54
712-22	VFY	DPS	FSP	MSG	4	MINOR	ID			GTO ST54
712-23	ST50		FSP	MSG	5	MAJOR	ID			GTO ST52
712-24	VFY	DPS	FSP	MSG	5	MINOR	ID			GTO ST52
712-25	ST52		FSP	MSG	5	MAJOR	ID			GTO ST60
712-26	VFY	DPS	FSP	MSG	5	MINOR	ID			GTO ST54
712-27	ST54		FSP	MSG	5	MINOR	ID			GTO ST60
712-28	VFY	DPS	GPC	ERROR	LOG1	ERROR	CODE	BFS		NOTE A GTO ST61 6.9.24-6
712-29	ST61		GPC	ERROR	LOG2	ERROR	CODE	BFS		NOTE A GTO ST62 6.9.24-6
712-30	ST62		GPC	ERROR	LOG3	ERROR	CODE	BFS		NOTE A GTO ST63 6.9.24-6



SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
CD	T					DESIGNATOR	SINGL			PAGE
CLOCK	E					OR	LO	HIGH	UNIT	

013-32	CVFY	ECLS	SYS 2	N2	SUPPLY PRESSURE	V61P2305A1	100	3300	PSIA	LCC-1	6.8.1-10
013-33	CVFY	ECLS	SYS 1	N2	TANK 1 TEMP	V61T2406A1	20	150	DEGF	1 OF 4	6.8.1-10
013-34	CVFY	ECLS	SYS 1	N2	TANK 2 TEMP	V61T2407A1	20	150	DEGF	1 OF 4	6.8.1-10
013-35	CVFY	ECLS	SYS 2	N2	TANK 1 TEMP	V61T2408A1	20	150	DEGF	1 OF 4	6.8.1-10
013-36	CVFY	ECLS	SYS 2	N2	TANK 2 TEMP	V61T2409A1	20	150	DEGF	1 OF 4	6.8.1-10
013-37	CVFY	ECLS	FCL 1		INTERCHANGER FLOWRAIE	V63R1100A1	2150	NOHI	LBM/HR	2 OF 3	6.8.3-2
013-38	CVFY	ECLS	FCL 1		PAYLOAD HX FLOWRATE	V63R1103A1	190	NOHI	LBM/HR	2 OF 3	6.8.3-2
013-39	CVFY	ECLS	FCL 1		COLDPLATE NETWORK FLOWRATE	V63R1105A1	265	NOHI	LBM/HR	LCC-3	6.8.3-2
013-40	CVFY	ECLS	FCL 1		PUMP INLET PRESS	V63P1108A1	92	117	PSIA	1 OF 2	6.8.3-4
013-41	CVFY	ECLS	FCL 1		ACCUMULATOR QUANTITY	V63Q1130A1	23	39	PCT	LCC-3	6.8.3-4
013-42	CVFY	ECLS	NH3	SYS A	TANK TEMP	V63T1180A1	-50	170	DEGF	1 OF 2	6.8.3-6
013-43	CVFY	ECLS	NH3	SYS B	TANK TEMP	V63T1188A1	-50	170	DEGF	LCC-1	6.8.3-6
013-44	CVFY	ECLS	NH3	SYS A	TANK PRESS	V63P1196A1	5	505	PSIA	LCC-1	6.8.3-6
013-45	CVFY	ECLS	NH3	SYS B	TANK PRESS	V63P1197A1	5	505	PSIA	LCC-1	6.8.3-6
013-46	CVFY	ECLS	FCL 1		EVAP OUT TEMP	V63T1207A1	30	50	DEGF	1 OF 2	6.8.3-9
013-47	CVFY	ECLS	FCL 2		EVAP OUT TEMP	V63T1407A1	30	50	DEGF	LCC-3	6.8.3-9
013-48	CVFY	ECLS	FCL 2		INTERCHANGER FLOWRATE	V63R1300A1	2150	NOHI	LBM/HR	2 OF 3	6.8.3-2
013-49	CVFY	ECLS	FCL 2		PAYLOAD HX FLOWRATE	V63R1303A1	190	NOHI	LBM/HR	2 OF 3	6.8.3-2
013-50	CVFY	ECLS	FCL 2		COLDPLATE NETWORK FLOWRATE	V63R1305A1	265	NOHI	LBM/HR	LCC-3	6.8.3-2
013-51	CVFY	ECLS	FCL 2		PUMP INLET PRESS	V63P1308A1	77	100	PSIA	1 OF 2	6.8.3-4
013-52	CVFY	ECLS	FCL 2		ACCUMULATOR QUANTITY	V63Q1330A1	23	39	PCT	LCC-3	6.8.3-4
057-01	VFY	ECLS	POT	TK D	OR WASTE TK 2 QTY	V62Q0544A1	2	105	PCT	1 OF 3	6.8.2-6
057-02	VFY	ECLS	POT	TK D	OR WASTE TK 2 QTY	V62Q0548A1	2	105	PCT	1 OF 3	6.8.2-6
057-03	VFY	ECLS	POT	TK D	OR WASTE TK 2 QTY	V62Q0548A1	2	105	PCT	LCC-1	6.8.2-6
057-04	VFY	ECLS	POT	TK D	OR WASTE TK 2 QTY	V62Q0420A1	2	105	PCT	LCC-1	6.8.2-6
296-02	VFY	ECLS	VCU1		SUPPLY VALVE OPEN IND	V62Q0410A1	2	83.3	PCT	LCC-1	6.8.2-6
296-03	CMD	ECLS	VCU1		SELECT	GFRX1217E	ON			GTO ST280	
297-00	CMD	ECLS	VCU1		PUMP1 STOP CMD	N03IS044E	ON				
297-01	CMD	ECLS	VCU1		PUMP2 STOP CMD	GFRK1030E	ON				
297-02	CMD	ECLS	VCU1		PUMP3 STOP CMD	GFRK1040E	ON				
298-00	CMD	ECLS	VCU2		PUMP1 STOP CMD	GFRK1050E	ON				
298-01	CMD	ECLS	VCU2		PUMP2 STOP CMD	GFRK2030E	ON				
298-02	CMD	ECLS	VCU2		PUMP3 STOP CMD	GFRK2040E	ON				
299-00	CMD	ECLS	VCU1		SUPPLY COOLANT CMD	GFRK205CE	ON				
299-01	CMD	ECLS	VCU2		SUPPLY COOLANT CMD	GFRK1140E	OFF				
299-02	CMD	ECLS	VCU1		BYP COOLANT CMD	GFRK2140E	OFF				
299-03	CMD	ECLS	VCU2		BYP COOLANT CMD	GFRK1150E	ON				
303-00	CMD	ECLS	VCU2		BYP COOLANT CMD	GFRK2150E	ON				
303-01	CMD	ECLS	VCU1		BYP COOLANT CMD	GFRK1150E	OFF				
316-03	CMD	ECLS	VCU2		REFRIG UNIT STOP CMD	GFRK2150E	OFF				
317-03	CMD	ECLS	VCU2		REFRIG UNIT STOP CMD	GFRK107CE	ON				
						GFRK2070E	ON				

SEQ	TIME	CD	CLOCK	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	DESIGNATOR	LO	HIGH	UNIT	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:
319-00				CMD	ECLS	GCU1 PUMP1 STOP CMD	GFRK1030E	OFF				
319-01				CMD	ECLS	GCU1 PUMP2 STOP CMD	GFRK1040E	OFF				
319-02				CMD	ECLS	GCU1 PUMP3 STOP CMD	GFRK1050E	OFF				
319-03				CMD	ECLS	GCU1 REFRIG UNIT STOP CMD	GFRK1070E	OFF				
319-20				CMD	ECLS	GCU2 PUMP1 STOP CMD	GFRK2030E	OFF				
319-21				CMD	ECLS	GCU2 PUMP2 STOP CMD	GFRK2040E	OFF				
319-22				CMD	ECLS	GCU2 PUMP3 STOP CMD	GFRK2050E	OFF				
319-23				CMD	ECLS	GCU2 REFRIG UNIT STOP CMD	GFRK2070E	OFF				
509-00				CMD	ECLS	GCU1 PUMP1 STOP CMD	GFRK1030E	OFF				
509-01				CMD	ECLS	GCU1 PUMP2 STOP CMD	GFRK1040E	OFF				
509-02				CMD	ECLS	GCU1 PUMP3 STOP CMD	GFRK1050E	OFF				
510-00				CMD	ECLS	GCU2 PUMP1 STOP CMD	GFRK2030E	OFF				
510-01				CMD	ECLS	GCU2 PUMP2 STOP CMD	GFRK2040E	OFF				
510-02				CMD	ECLS	GCU2 PUMP3 STOP CMD	GFRK2050E	OFF				
511-00				CMD	ECLS	GCU1 BYP COOLANT CMD	GFRK1150E	OFF				
511-01				CMD	ECLS	GCU2 BYP COOLANT CMD	GFRK2150E	OFF				
512-06				VFY	ECLS	GCU1 SELECT	N03IS044E	ON				
513-00				CMD	ECLS	GCU1 SUPPLY COOLANT CMD	GFRK1140E	ON				
514-00				CMD	ECLS	GCU2 SUPPLY COOLANT CMD	GFRK2140E	ON				
532-00				CMD	ECLS	GCU1 PUMP 1 START CMD	GFRK1000E	ON				
532-01				CMD	ECLS	GCU1 PUMP 2 START CMD	GFRK1010E	ON				
532-02				CMD	ECLS	GCU2 PUMP 1 START CMD	GFRK2000E	ON				
534-01				CMD	ECLS	GCU2 PUMP 2 START CMD	GFRK2010E	ON				
535-00				CMD	ECLS	GCU1 PUMP 1 START CMD	GFRK1000E	OFF				
535-01				CMD	ECLS	GCU1 PUMP 2 START CMD	GFRK1010E	OFF				
535-02				CMD	ECLS	GCU2 PUMP 1 START CMD	GFRK2000E	OFF				
535-03				CMD	ECLS	GCU2 PUMP 2 START CMD	GFRK2010E	OFF				
578-08				CMD	ECLS	GCU1 SUPPLY COOLANT CMD	GFRK1140E	OFF				
010-01				CMD	ECLS	GCU2 SUPPLY COOLANT CMD	GFRK2140E	OFF				
010-03				CVFY	EPDC	AC BUS 1 PHASE A VOLTS	V76V1500A1	115	120	VAC	LCC-3	6.9.7-6
010-05				CVFY	EPDC	AC BUS 1 PHASE B VOLTS	V76V1501A1	115	120	VAC	LCC-3	6.9.7-6
010-07				CVFY	EPDC	AC BUS 1 PHASE C VOLTS	V76V1502A1	115	120	VAC	LCC-3	6.9.7-6
010-09				CVFY	EPDC	AC BUS 2 PHASE A VOLTS	V76V1600A1	115	120	VAC	LCC-3	6.9.7-6
010-11				CVFY	EPDC	AC BUS 2 PHASE B VOLTS	V76V1601A1	115	120	VAC	LCC-3	6.9.7-6
010-13				CVFY	EPDC	AC BUS 2 PHASE C VOLTS	V76V1602A1	115	120	VAC	LCC-3	6.9.7-6
010-15				CVFY	EPDC	AC BUS 3 PHASE A VOLTS	V76V1700A1	115	120	VAC	LCC-3	6.9.7-6
010-17				CVFY	EPDC	AC BUS 3 PHASE B VOLTS	V76V1701A1	115	120	VAC	LCC-3	6.9.7-6
010-18				CVFY	EPDC	AC BUS 3 PHASE C VOLTS	V76V1702A1	115	120	VAC	LCC-3	6.9.7-6
010-20				CVFY	EPDC	MN BUS A VOLTAGE	V76V0100A1	N0LO	32.0	V	1 OF 2	6.5.2-2
010-22				CVFY	EPDC	MN BUS B VOLTAGE	V76V0200A1	N0LO	32.0	V	1 OF 2	6.5.2-2
010-22				CVFY	EPDC	MN BUS C VOLTAGE	V76V0300A1	N0LO	32.0	V	1 OF 2	6.5.2-2

DATE 12-10-85

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI S90C5 - L

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	VALUE	FUNCTION	ELSE	DURATION	LCC	PAGE
	CD	:	:	:	:	:	DESIGNATOR: SINGL	:	:	:	:
	CLOCK	:	:	:	:	:	OR LO:HIGH	:	:	:	:
	:	:	:	:	:	:	UNIT	:	:	:	:

010-24			CVFY EPDC		L SRB BUS A BACKUP PWR ON		V76X6775E1	OFF	LCC-3	6.9.7-9	
010-25			CVFY EPDC		R SRB BUS A BACKUP PWR ON		V76X6776E1	OFF	LCC-3	6.9.7-9	
010-26			CVFY EPDC		L SRB BUS B BACKUP PWR ON		V76X6777E1	OFF	LCC-3	6.9.7-9	
010-27			CVFY EPDC		R SRB BUS B BACKUP PWR ON		V76X6778E1	OFF	LCC-3	6.9.7-9	
010-28			CVFY EPDC		AFT PCA-5 VOLTAGE	32.0	V		1 OF 2	2.3-5	
010-29			CVFY EPDC		AFT PCA-6 VOLTAGE	32.0	V		LCC-3	2.3-5	
010-32			CVFY EPDC		MAIN BUS A CONT BUS AB2/CA2 RPC		V76X0125E1	ON	2 OF 3	6.9.7-4	
010-33			CVFY EPDC		MAIN BUS B CONT BUS AB2/BC2 RPC		V76X0225E1	ON	2 OF 3	6.9.7-4	
010-34			CVFY EPDC		MAIN BUS C CONT BUS BC2/CA2 RPC		V76X0325E1	ON	LCC-4	6.9.7-4	
010-35			CVFY EPDC		MAIN BUS A CONT BUS AB3/CA3 RPC		V76X0126E1	ON	2 OF 3	6.9.7-4	
010-36			CVFY EPDC		MAIN BUS B CONT BUS AB3/BC3 RPC		V76X0226E1	ON	2 OF 3	6.9.7-4	
010-37			CVFY EPDC		MAIN BUS C CONT BUS BC3/CA3 RPC		V76X0326E1	ON	LCC-4	6.9.7-4	
010-38			CVFY EPDC		MAIN BUS B CONT BUS AB1/BC1 RPC		V76X0224E1	ON	2 OF 3	6.9.7-4	
010-39			CVFY EPDC		MAIN BUS C CONT BUS BC1/CA1 RPC		V76X0324E1	ON	2 OF 3	6.9.7-4	
010-40			CVFY EPDC		MAIN BUS A CONT BUS AB1/CA1 RPC		V76X0124E1	ON	LCC-4	6.9.7-4	
010-48			CVFY EPDC		FC1 TO ESS1BC SWITCH ON		V76S0163E1	ON	2 OF 3	6.9.7-4	
010-49			CVFY EPDC		MNB TO ESS1BC RPC ON		V76X0236E1	ON	2 OF 3	6.9.7-11	
010-50			CVFY EPDC		MNC TO ESS1BC RPC ON		V76X0335E1	ON	LCC-3	6.9.7-11	
010-51			CVFY EPDC		FC2 TO ESS2CA SWITCH ON		V76S0263E1	ON	2 OF 3	6.9.7-11	
010-52			CVFY EPDC		MNC TO ESS2CA RPC ON		V76X0336E1	ON	2 OF 3	6.9.7-11	
010-53			CVFY EPDC		MNA TO ESS2CA RPC ON		V76X0136E1	ON	LCC-3	6.9.7-11	
010-54			CVFY EPDC		FC3 TO ESS3AB SWITCH ON		V76S0135E1	ON	2 OF 3	6.9.7-11	
010-55			CVFY EPDC		MNA TO ESS3AB RPC ON		V76X0135E1	ON	2 OF 3	6.9.7-11	
010-56			CVFY EPDC		MNB TO ESS3AB RPC ON		V76X0235E1	ON	LCC-3	6.9.7-11	
041-00			CVFY EPDC		SYS A CPA DC VOLTAGE		GMSV1313A	26	NOHI	V	3.1-6
041-01			CVFY EPDC		SYS A CPA DC RED VOLTAGE		GMSV3313A	26	NOHI	V	3.1-6
041-02			CVFY EPDC		SYS B CPA DC VOLTAGE		GMSV2313A	26	NOHI	V	3.1-6
041-03			CVFY EPDC		SYS B CPA DC RED VOLTAGE		GMSV4313A	26	NOHI	V	3.1-6
041-04			CVFY EPDC		H2 - BURN SYS A CPA DC VOLTS		GMSV5313A	26	NOHI	V	3.1-10
041-05			CVFY EPDC		H2 - BURN SYS A CPA DC RED VOLTS		GMSV7313A	26	NOHI	V	3.1-10
041-06			CVFY EPDC		H2 - BURN SYS B CPA DC VOLTS		GMSV6313A	26	NOHI	V	3.1-10
041-07			CVFY EPDC		H2 - BURN SYS B CPA DC RED VOLTS		GMSV8313A	26	NOHI	V	3.1-10
055-02			VFY EPDC		SYS A ETVAS PIC CAP VOLTS		GMSV1311A	NOLO	1-5	V	1 OF 2
055-03			VFY EPDC		SYS A ETVAS PIC CAP RED VOLTS		GMSV3311A	NOLO	1-5	V	1 OF 2
055-04			VFY EPDC		SYS B ETVAS PIC CAP VOLTS		GMSV2311A	NOLO	1-5	V	1 OF 2
055-05			VFY EPDC		SYS B ETVAS PIC CAP RED VOLTS		GMSV4311A	NOLO	1-5	V	1 OF 2
174-00			CMD EPDC		GSE PWR MN BUS A OFF CMD		V76K0192W	ON	INHB	M009	
174-01			CMD EPDC		GSE PWR MN BUS B OFF CMD		V76K0292W	ON	INHB	M009	
174-02			CMD EPDC		GSE PWR MN BUS C OFF CMD		V76K0392W	ON	INHB	M009	
177-00			CMD EPDC		GSE PWR MN BUS A OFF CMD		V76K0192W	OFF	INHB	M009	
177-01			CMD EPDC		GSE PWR MN BUS B OFF CMD		V76K0292W	OFF	INHB	M009	



SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
:	:	CD	:	:	:	DESIGNATOR	:	:	:	PAGE
:	CLOCK	:	:	:	:	:	OR LO	UNIT	:	:
:	:	:	:	:	:	:	:	:	:	:
:	:	S	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:
177-02		CMD	EPDC	GSE	PWR MN BUS C OFF CMD	V76K0392W	OFF			
177-03		CMD	EPDC	ORB	GND PWR MN BUS A CMD PRI	G76K0180E	OFF			
177-04		CMD	EPDC	ORB	GND PWR MN BUS A CMD SEC	G76K0181E	OFF			
177-05		CMD	EPDC	ORB	GND PWR MN BUS B CMD PRI	G76K0280E	OFF			
177-06		CMD	EPDC	ORB	GND PWR MN BUS B CMD SEC	G76K0281E	OFF			
177-07		CMD	EPDC	ORB	GND PWR MN BUS C CMD PRI	G76K038CE	OFF			
177-08		CMD	EPDC	ORB	GND PWR MN BUS C CMD SEC	G76K0381E	OFF			
179-00		VFY	EPDC	GSE	PWR MN BUS A ON IND	V76X0190W	OFF	INHB	MSEQ	
179-01		VFY	EPDC	GSE	PWR MN BUS B ON IND	V76X0290W	OFF	INHB	MSEQ	
179-02		VFY	EPDC	GSE	PWR MN BUS C ON IND	V76X0390W	OFF	INHB	MSEQ	
228-00		CMD	EPDC	H2-BURN	SYS A ARM	GMSK5012E	ON			
228-01		CMD	EPDC	H2-BURN	SYS B ARM	GMSK6C12E	ON			
231-00		CVFY	EPDC	H2 BURN	SYS A ENG 1 CAP	GMSV5311A	35.7	NOHI	V	1 OF 2
231-01		CVFY	EPDC	H2 BURN	SYS B ENG 1 CAP	GMSV6311A	35.7	NOHI	V	3.1-11
231-02		CVFY	EPDC	H2 BURN	SYS A ENG 2 CAP	GMSV5309A	35.7	NOHI	V	1 OF 2
231-03		CVFY	EPDC	H2 BURN	SYS B ENG 2 CAP	GMSV6309A	35.7	NOHI	V	3.1-11
231-04		CVFY	EPDC	H2 BURN	SYS A ENG 3 CAP	GMSV5310A	35.7	NOHI	V	1 OF 2
231-05		CVFY	EPDC	H2 BURN	SYS B ENG 3 CAP	GMSV6310A	35.7	NOHI	V	3.1-11
241-00		K	CMD	EPDC	ET BIPOD HTR AC-1 ON CMD	G56K0015E	OFF			
241-01		K	CMD	EPDC	ET BIPOD HTR AC-2 ON CMD	G56K0025E	OFF			
241-02		K	CMD	EPDC	ET R BIPOD HTR PWR ON CMD	G56K0135E	OFF			
241-03		K	CMD	EPDC	ET L BIPOD HTR PWR ON CMD	G56K0145E	OFF			
241-04		V	CMD	EPDC	ET BIPOD HTR PWR OFF CMD	G56K0010E	ON			
241-05		V	CMD	EPDC	ET L BIPOD TEMP CONT OFF CMD	G56K0050E	ON			
241-06		V	CMD	EPDC	ET R BIPOD TEMP CONT OFF CMD	G56K006CE	ON			
241-07		V	CMD	EPDC	ET B/U BIPOD TEMP CONT OFF CMD	G56K0070E	ON			
241-08		CMD	EPDC	ET AFT HTR AC PWR OFF CMD	G56K0030E	ON				
241-09		CMD	EPDC	LH2 FDLN INBD HTR AC PWR ON CMD	G56K0210E	OFF				
241-10		CMD	EPDC	LH2 FDLN OTBD HTR AC PWR ON CMD	G56K0230E	OFF				
241-11		CMD	EPDC	L02 EB INBD BKT HTR AC PWR ON C	G56K025CE	OFF				
241-12		CMD	EPDC	L02 FDLN BKT HTR AC PWR ON CMD	G56K027CE	OFF				
241-13		CMD	EPDC	L02 EB OTBD BKT HTR AC PWR ON C	G56K0290E	OFF				
277-00		CVFY	EPDC	SYS A RH SRB HDP M1 PIC CAP VOLT	GMSV1301A	35.7	NOHI	V	1 OF 2	3.1-9
277-01		CVFY	EPDC	SYS A RH HDP M1 PIC CAP VOLT RED	GMSV3301A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
277-02		CVFY	EPDC	SYS A RH SRB HDP M2 PIC CAP VOLT	GMSV1302A	35.7	NOHI	V	1 OF 2	3.1-9
277-03		CVFY	EPDC	SYS A RH HDP M2 PIC CAP VOLT RED	GMSV3302A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
277-04		CVFY	EPDC	SYS A RH SRB HDP M3 PIC CAP VOLT	GMSV1303A	35.7	NOHI	V	1 OF 2	3.1-9
277-05		CVFY	EPDC	SYS A RH HDP M3 PIC CAP VOLT RED	GMSV3303A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
277-06		CVFY	EPDC	SYS A RH SRB HDP M4 PIC CAP VOLT	GMSV1304A	35.7	NOHI	V	1 OF 2	3.1-9
277-07		CVFY	EPDC	SYS A RH HDP M4 PIC CAP VOLT RED	GMSV3304A	35.7	NOHI	V	EXIT	TIL MSRB 3.1-9
277-08		CVFY	EPDC	SYS A LH SRB HDP M5 PIC CAP VOLT	GMSV1305A	35.7	NOHI	V	1 OF 2	3.1-9

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SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	SS
:	CD	:	:	:	:	DESIGNATOR	:	:	:	FACE	:
:	CLOCK	:	:	:	:	:	OR LO	:	:	:	HF
:	:	:	:	:	:	:	HIGH	:	:	:	FD

277-09	CVFY	EPDC	SYS A	LH	HDP	M5	PIC	CAP	VOLT	RED	GMSV3305A	35.7	NOHI	V	EXIT	TIL	MSRB	3.1-9		
277-10	CVFY	EPDC	SYS A	LH	SRB	HDP	M6	PIC	CAP	VOLT	GMSV1306A	35.7	NOHI	V	1 OF 2				3.1-9	
277-11	CVFY	EPDC	SYS A	LH	HDP	M6	PIC	CAP	VOLT	RED	GMSV3306A	35.7	NOHI	V	EXIT				3.1-9	
277-12	CVFY	EPDC	SYS A	LH	SRB	HDP	M7	PIC	CAP	VOLT	GMSV1307A	35.7	NOHI	V	1 OF 2				3.1-9	
277-13	CVFY	EPDC	SYS A	LH	HDP	M7	PIC	CAP	VOLT	RED	GMSV3307A	35.7	NOHI	V	EXIT				3.1-9	
277-14	CVFY	EPDC	SYS A	LH	SRB	HDP	M8	PIC	CAP	VOLT	GMSV1308A	35.7	NOHI	V	1 OF 2				3.1-9	
277-15	CVFY	EPDC	SYS A	LH	HDP	M8	PIC	CAP	VOLT	RED	GMSV3308A	35.7	NOHI	V	EXIT				3.1-9	
277-16	CVFY	EPDC	SYS B	RH	SRB	HDP	M1	PIC	CAP	VOLT	GMSV2301A	35.7	NOHI	V	1 OF 2				3.1-9	
277-17	CVFY	EPDC	SYS B	RH	HDP	M1	PIC	CAP	VOLT	RED	GMSV4301A	35.7	NOHI	V	EXIT				3.1-9	
277-18	CVFY	EPDC	SYS B	RH	SRB	HDP	M2	PIC	CAP	VOLT	GMSV2302A	35.7	NOHI	V	1 OF 2				3.1-9	
277-19	CVFY	EPDC	SYS B	RH	HDP	M2	PIC	CAP	VOLT	RED	GMSV4302A	35.7	NOHI	V	EXIT				3.1-9	
277-20	CVFY	EPDC	SYS B	RH	SRB	HDP	M3	PIC	CAP	VOLT	GMSV2303A	35.7	NOHI	V	1 OF 2				3.1-9	
277-21	CVFY	EPDC	SYS B	RH	HDP	M3	PIC	CAP	VOLT	RED	GMSV4303A	35.7	NOHI	V	EXIT				3.1-9	
277-22	CVFY	EPDC	SYS B	RH	SRB	HDP	M4	PIC	CAP	VOLT	GMSV2304A	35.7	NOHI	V	1 OF 2				3.1-9	
277-23	CVFY	EPDC	SYS B	RH	HDP	M4	PIC	CAP	VOLT	RED	GMSV4304A	35.7	NOHI	V	EXIT				3.1-9	
277-24	CVFY	EPDC	SYS B	LH	SRB	HDP	M5	PIC	CAP	VOLT	GMSV2305A	35.7	NOHI	V	1 OF 2				3.1-9	
277-25	CVFY	EPDC	SYS B	LH	HDP	M5	PIC	CAP	VOLT	RED	GMSV4305A	35.7	NOHI	V	EXIT				3.1-9	
277-26	CVFY	EPDC	SYS B	LH	SRB	HDP	M6	PIC	CAP	VOLT	GMSV2306A	35.7	NOHI	V	1 OF 2				3.1-9	
277-27	CVFY	EPDC	SYS B	LH	HDP	M6	PIC	CAP	VOLT	RED	GMSV4306A	35.7	NOHI	V	EXIT				3.1-9	
277-28	CVFY	EPDC	SYS B	LH	SRB	HDP	M7	PIC	CAP	VOLT	GMSV2307A	35.7	NOHI	V	1 OF 2				3.1-9	
277-29	CVFY	EPDC	SYS B	LH	HDP	M7	PIC	CAP	VOLT	RED	GMSV4307A	35.7	NOHI	V	EXIT				3.1-9	
277-30	CVFY	EPDC	SYS B	LH	SRB	HDP	M8	PIC	CAP	VOLT	GMSV2308A	35.7	NOHI	V	1 OF 2				3.1-9	
277-31	CVFY	EPDC	SYS B	LH	HDP	M8	PIC	CAP	VOLT	RED	GMSV4308A	35.7	NOHI	V	EXIT				3.1-9	
277-32	CVFY	EPDC	SYS A	ETVAS	PIC	CAP	VOLTS				GMSV1311A	35.7	NOHI	V	1 OF 2				3.1-8	
277-33	CVFY	EPDC	SYS A	ETVAS	PIC	CAP	RED	VOLTS			GMSV3311A	35.7	NOHI	V	EXIT				3.1-8	
277-34	CVFY	EPDC	SYS B	ETVAS	PIC	CAP	VOLTS				GMSV2311A	35.7	NOHI	V	1 OF 2				3.1-8	
277-35	CVFY	EPDC	SYS B	ETVAS	PIC	CAP	RED	VOLTS			GMSV4311A	35.7	NOHI	V	EXIT				3.1-8	
277-36	CVFY	EPDC	SYS A	LH2	TSM	PIC	CAP	VOLTS			GMSV1309A	35.7	NOHI	V	1 OF 2				3.1-7	
277-37	CVFY	EPDC	SYS A	LH2	TSM	PIC	CAP	RED	VOLTS		GMSV3309A	35.7	NOHI	V	EXIT				3.1-7	
277-38	CVFY	EPDC	SYS A	LO2	TSM	PIC	CAP	VOLTS			GMSV1310A	35.7	NOHI	V	1 OF 2				3.1-7	
277-39	CVFY	EPDC	SYS A	LO2	TSM	PIC	CAP	RED	VOLTS		GMSV3310A	35.7	NOHI	V	EXIT				3.1-7	
277-40	CVFY	EPDC	SYS B	LH2	TSM	PIC	CAP	VOLTS			GMSV2309A	35.7	NOHI	V	1 OF 2				3.1-7	
277-41	CVFY	EPDC	SYS B	LH2	TSM	PIC	CAP	RED	VOLTS		GMSV4309A	35.7	NOHI	V	EXIT				3.1-7	
277-42	CVFY	EPDC	SYS B	LO2	TSM	PIC	CAP	VOLTS			GMSV2310A	35.7	NOHI	V	1 OF 2				3.1-7	
277-43	CVFY	EPDC	SYS B	LO2	TSM	PIC	CAP	RED	VOLTS		GMSV4310A	35.7	NOHI	V	EXIT				3.1-7	
289-00	CMD	EPDC	H2-BURN	SYS	A	FIRE	1				GMSK013E	ON			EXIT				3.1-7	
289-01	CMD	EPDC	H2-BURN	SYS	B	FIRE	1				GMSK6013E	ON								
289-02	CMD	EPDC	H2-BURN	SYS	A	FIRE	2				GMSK5014E	ON								
289-03	CMD	EPDC	H2-BURN	SYS	B	FIRE	2				GMSK6014E	ON								
294-00	CMD	EPDC	IT110	BUS	ON	CMD					GASK0154E	OFF								
294-01	CMD	EPDC	IT210	BUS	ON	CMD					GASK0255E	OFF								







DATE 12-10-85

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI 990C5 - L

SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
:	CD	:	:	:	DESIGNATOR	:	:	:	PAGE
:	CLOCK	:	:	:	SINGL	:	:	:	:
:	:	:	:	:	OR LO	:	:	:	:
:	:	:	:	:	HIGH	:	:	:	:
:	:	:	:	:	UNIT	:	:	:	:

538-17	VFY	EPDC	RH	VOLTAGE AFT MID BKT PIC CAP B	B55V2610C1	NOLO	1.5	VDC	DISPLAY
538-18	VFY	EPDC	RH	VOLTAGE AFT LOWER BKT PIC CAP A	B55V2611C1	NOLO	1.5	VDC	DISPLAY
538-19	VFY	EPDC	RH	VOLTAGE AFT LOWER BKT PIC CAP B	B55V2612C1	NOLO	1.5	VDC	DISPLAY
538-20	VFY	EPDC	LH	VOLTAGE AFT UPPER BKT PIC CAP A	B55V1607C1	NOLO	1.5	VDC	DISPLAY
538-21	VFY	EPDC	LH	VOLTAGE AFT UPPER BKT PIC CAP B	B55V1608C1	NOLO	1.5	VDC	DISPLAY
538-22	VFY	EPDC	LH	VOLTAGE AFT MID BKT PIC CAP A	B55V1609C1	NOLO	1.5	VDC	DISPLAY
538-23	VFY	EPDC	LH	VOLTAGE AFT MID BKT PIC CAP B	B55V1610C1	NOLO	1.5	VDC	DISPLAY
538-24	VFY	EPDC	LH	VOLTAGE AFT LOWER BKT PIC CAP A	B55V1611C1	NOLO	1.5	VDC	DISPLAY
538-25	VFY	EPDC	LH	VOLTAGE AFT LOWER BKT PIC CAP B	B55V1612C1	NOLO	1.5	VDC	DISPLAY
538-26	VFY	EPDC	LH	VOLTAGE FWD SEP MOTOR PIC CAP A	B55V1613C1	NOLO	1.5	VDC	DISPLAY
538-27	VFY	EPDC	LH	VOLTAGE FWD SEP MOTOR PIC CAP B	B55V1614C1	NOLO	1.5	VDC	DISPLAY
538-28	VFY	EPDC	RH	VOLTAGE FWD SEP MOTOR PIC CAP A	B55V2613C1	NOLO	1.5	VDC	DISPLAY
538-29	VFY	EPDC	RH	VOLTAGE FWD SEP MOTOR PIC CAP B	B55V2614C1	NOLO	1.5	VDC	DISPLAY
538-30	VFY	EPDC	LH	VOLTAGE AFT SEP MOTOR PIC CAP A	B55V1615C1	NOLO	1.5	VDC	DISPLAY
538-31	VFY	EPDC	LH	VOLTAGE AFT SEP MOTOR PIC CAP B	B55V1616C1	NOLO	1.5	VDC	DISPLAY
538-32	VFY	EPDC	RH	VOLTAGE AFT SEP MOTOR PIC CAP A	B55V2615C1	NOLO	1.5	VDC	DISPLAY
538-33	VFY	EPDC	RH	VOLTAGE AFT SEP MOTOR PIC CAP B	B55V2616C1	NOLO	1.5	VDC	DISPLAY
589-00	CMD	EPDC	FWD	LCA 1 FIRE 1 INHIBIT CMD	V76K6301NL	ON			
589-01	CMD	EPDC	FWD	LCA 1 FIRE 2 INHIBIT CMD	V76K6302NL	ON			
589-02	CMD	EPDC	FWD	LCA 2 FIRE 1 INHIBIT CMD	V76K6303NL	ON			
589-03	CMD	EPDC	FWD	LCA 2 FIRE 2 INHIBIT CMD	V76K6304NL	ON			
589-04	CMD	EPDC	FWD	LCA 3 FIRE 1 INHIBIT CMD	V76K6305NL	ON			
589-05	CMD	EPDC	FWD	LCA 3 FIRE 2 INHIBIT CMD	V76K6306NL	ON			
618-00	VFY	EPDC	SYS	A RH SRB HDP M1 PIC CAP VOLT	GMSV1301A	NOLO	1.5	V	DISPLAY
618-01	VFY	EPDC	SYS	A RH HDP M1 PIC CAP VOLT RED	GMSV3301A	NOLO	1.5	V	DISPLAY
618-02	VFY	EPDC	SYS	A RH SRB HDP M2 PIC CAP VOLT	GMSV1302A	NOLO	1.5	V	DISPLAY
618-03	VFY	EPDC	SYS	A RH HDP M2 PIC CAP VOLT RED	GMSV3302A	NOLO	1.5	V	DISPLAY
618-04	VFY	EPDC	SYS	A RH SRB HDP M3 PIC CAP VOLT	GMSV1303A	NOLO	1.5	V	DISPLAY
618-05	VFY	EPDC	SYS	A RH HDP M3 PIC CAP VOLT RED	GMSV3303A	NOLO	1.5	V	DISPLAY
618-06	VFY	EPDC	SYS	A RH SRB HDP M4 PIC CAP VOLT	GMSV1304A	NOLO	1.5	V	DISPLAY
618-07	VFY	EPDC	SYS	A RH HDP M4 PIC CAP VOLT RED	GMSV3304A	NOLO	1.5	V	DISPLAY
618-08	VFY	EPDC	SYS	A LH SRB HDP M5 PIC CAP VOLT	GMSV1305A	NOLO	1.5	V	DISPLAY
618-09	VFY	EPDC	SYS	A LH HDP M5 PIC CAP VOLT RED	GMSV3305A	NOLO	1.5	V	DISPLAY
618-10	VFY	EPDC	SYS	A LH SRB HDP M6 PIC CAP VOLT	GMSV1306A	NOLO	1.5	V	DISPLAY
618-11	VFY	EPDC	SYS	A LH HDP M6 PIC CAP VOLT RED	GMSV3306A	NOLO	1.5	V	DISPLAY
618-12	VFY	EPDC	SYS	A LH SRB HDP M7 PIC CAP VOLT	GMSV1307A	NOLO	1.5	V	DISPLAY
618-13	VFY	EPDC	SYS	A LH HDP M7 PIC CAP VOLT RED	GMSV3307A	NOLO	1.5	V	DISPLAY
618-14	VFY	EPDC	SYS	A LH SRB HDP M8 PIC CAP VOLT	GMSV1308A	NOLO	1.5	V	DISPLAY
618-15	VFY	EPDC	SYS	A LH HDP M8 PIC CAP VOLT RED	GMSV3308A	NOLO	1.5	V	DISPLAY
618-16	VFY	EPDC	SYS	B RH SRB HDP M1 PIC CAP VOLT	GMSV2301A	NOLO	1.5	V	DISPLAY
618-17	VFY	EPDC	SYS	B RH HDP M1 PIC CAP VOLT RED	GMSV4301A	NOLO	1.5	V	DISPLAY

SEQ	TIME	I	FUNC:DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION
:	CD	:	:	:	:DESIGNATOR:SYNGL:	:	:	:
:	CLOCK	:	:	:	:OR LO:HIGH: UNIT:	:	:	:

618-18	VFY	EPDC	SYS B RH SRB HDP M2 PIC CAP VOLT	GMSV2302A	NOL0	1.5	V	DISPLAY
618-19	VFY	EPDC	SYS B RH HDP M2 PIC CAP VOLT RED	GMSV4302A	NOL0	1.5	V	DISPLAY
618-20	VFY	EPDC	SYS B RH SRB HDP M3 PIC CAP VOLT	GMSV2303A	NOL0	1.5	V	DISPLAY
618-21	VFY	EPDC	SYS B RH HDP M3 PIC CAP VOLT RED	GMSV4303A	NOL0	1.5	V	DISPLAY
618-22	VFY	EPDC	SYS B RH SRB HDP M4 PIC CAP VOLT	GMSV2304A	NOL0	1.5	V	DISPLAY
618-23	VFY	EPDC	SYS B RH HDP M4 PIC CAP VOLT RED	GMSV4304A	NOL0	1.5	V	DISPLAY
618-24	VFY	EPDC	SYS B LH SRB HDP M5 PIC CAP VOLT	GMSV2305A	NOL0	1.5	V	DISPLAY
618-25	VFY	EPDC	SYS B LH HDP M5 PIC CAP VOLT RED	GMSV4305A	NOL0	1.5	V	DISPLAY
618-26	VFY	EPDC	SYS B LH SRB HDP M6 PIC CAP VOLT	GMSV2306A	NOL0	1.5	V	DISPLAY
618-27	VFY	EPDC	SYS B LH HDP M6 PIC CAP VOLT RED	GMSV4306A	NOL0	1.5	V	DISPLAY
618-28	VFY	EPDC	SYS B LH SRB HDP M7 PIC CAP VOLT	GMSV2307A	NOL0	1.5	V	DISPLAY
618-29	VFY	EPDC	SYS B LH HDP M7 PIC CAP VOLT RED	GMSV4307A	NOL0	1.5	V	DISPLAY
618-30	VFY	EPDC	SYS B LH SRB HDP M8 PIC CAP VOLT	GMSV2308A	NOL0	1.5	V	DISPLAY
618-31	VFY	EPDC	SYS B LH HDP M8 PIC CAP VOLT RED	GMSV4308A	NOL0	1.5	V	DISPLAY
618-32	VFY	EPDC	SYS A ETVAS PIC CAP VOLTS	GMSV1311A	NOL0	1.5	V	DISPLAY
618-33	VFY	EPDC	SYS A ETVAS PIC CAP RED VOLTS	GMSV3311A	NOL0	1.5	V	DISPLAY
618-34	VFY	EPDC	SYS B ETVAS PIC CAP VOLTS	GMSV2311A	NOL0	1.5	V	DISPLAY
618-35	VFY	EPDC	SYS B ETVAS PIC CAP RED VOLTS	GMSV4311A	NOL0	1.5	V	DISPLAY
618-36	VFY	EPDC	SYS A LH2 TSM PIC CAP VOLTS	GMSV1309A	NOL0	1.5	V	DISPLAY
618-37	VFY	EPDC	SYS A LH2 TSM PIC CAP RED VOLTS	GMSV3309A	NOL0	1.5	V	DISPLAY
618-38	VFY	EPDC	SYS A L02 TSM PIC CAP VOLTS	GMSV1310A	NOL0	1.5	V	DISPLAY
618-39	VFY	EPDC	SYS A L02 TSM PIC CAP RED VOLTS	GMSV3310A	NOL0	1.5	V	DISPLAY
618-40	VFY	EPDC	SYS B LH2 TSM PIC CAP VOLTS	GMSV2309A	NOL0	1.5	V	DISPLAY
618-41	VFY	EPDC	SYS B LH2 TSM PIC CAP RED VOLTS	GMSV4309A	NOL0	1.5	V	DISPLAY
618-42	VFY	EPDC	SYS B L02 TSM PIC CAP VOLTS	GMSV231CA	NOL0	1.5	V	DISPLAY
618-43	VFY	EPDC	SYS B L02 TSM PIC CAP RED VOLTS	GMSV4310A	NOL0	1.5	V	DISPLAY
701-10			LH IGN PIC CAP A HOLD	V90X8383X1	OFF			DISPLAY
701-11			RH IGN PIC CAP A HOLD	V90X8385X1	OFF			DISPLAY
701-12			LH IGN PIC CAP B HOLD	V90X8384X1	OFF			DISPLAY
701-13			RH IGN PIC CAP B HOLD	V90X8386X1	OFF			DISPLAY
037-00			LEFT RHC ROLL CMD A	V72K1155C1	-6.8	6.8	DEG	3 OF 2 6.9.10-2
037-01			LEFT RHC ROLL CMD B	V72K1170C1	-6.8	6.8	DEG	3 OF 2 6.9.10-2
037-02			LEFT RHC ROLL CMD C	V72K1185C1	-6.8	6.8	DEG	INHB M009 6.9.10-2
037-03			LEFT RHC PITCH CMD A	V72K1156C1	-5.1	5.1	DEG	3 OF 2 6.9.10-2
037-04			LEFT RHC PITCH CMD B	V72K1171C1	-5.1	5.1	DEG	3 OF 2 6.9.10-2
037-05			LEFT RHC PITCH CMD C	V72K1186C1	-5.1	5.1	DEG	INHB M009 6.9.10-2
037-06			LEFT RHC YAW CMD A	V72K1157C1	-2.8	2.8	DEG	3 OF 2 6.9.10-2
037-07			LEFT RHC YAW CMD B	V72K1172C1	-2.8	2.8	DEG	3 OF 2 6.9.10-2
037-08			LEFT RHC YAW CMD C	V72K1187C1	-2.8	2.8	DEG	INHB M009 6.9.10-2
037-09			RIGHT RHC ROLL CMD A	V72K1205C1	-6.8	6.8	DEG	3 OF 2 6.9.10-2
037-10			RIGHT RHC ROLL CMD B	V72K1220C1	-6.8	6.8	DEG	3 OF 2 6.9.10-2

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	FACE
:	CD	:	:	:	:	DESIGNATOR	:	:	:	:	:
:	CLOCK	:	:	:	:	SINGL	:	:	:	:	:
:	:	:	:	:	:	:	OR LO:HIGH	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
037-11			CVFY	FCL	RIGHT RHC ROLL CMD C	V72K1235C1	-6.8	DEG	INHB	PC09	6.9.10-2
037-12			CVFY	FCL	RIGHT RHC PITCH CMD A	V72K1206C1	-5.1	DEG	3 OF 2		6.9.10-2
037-13			CVFY	FCL	RIGHT RHC PITCH CMD B	V72K1221C1	-5.1	DEG	3 OF 2		6.9.10-2
037-14			CVFY	FCL	RIGHT RHC PITCH CMD C	V72K1236C1	-5.1	DEG	INHB	MO09	6.9.10-2
037-15			CVFY	FCL	RIGHT RHC YAW CMD A	V72K1207C1	-2.8	DEG	3 OF 2		6.9.10-2
037-16			CVFY	FCL	RIGHT RHC YAW CMD B	V72K1222C1	-2.8	DEG	3 OF 2		6.9.10-2
037-17			CVFY	FCL	RIGHT RHC YAW CMD C	V72K1237C1	-2.8	DEG	INHB	MO09	6.9.10-2
038-00			CVFY	FCL	FWD THC POS X OUTPUT A	V72K1315X1	OFF		2 OF 3		6.9.10-4
038-01			CVFY	FCL	FWD THC POS X OUTPUT B	V72K1335X1	OFF		2 OF 3		6.9.10-4
038-02			CVFY	FCL	FWD THC POS X OUTPUT C	V72K1355X1	OFF		INHB	MSEQ	6.9.10-4
038-03			CVFY	FCL	FWD THC NEG X OUTPUT A	V72K1316X1	OFF		2 OF 3		6.9.10-4
038-04			CVFY	FCL	FWD THC NEG X OUTPUT B	V72K1336X1	OFF		2 OF 3		6.9.10-4
038-05			CVFY	FCL	FWD THC NEG X OUTPUT C	V72K1356X1	OFF		INHB	MSEQ	6.9.10-4
038-06			CVFY	FCL	FWD THC POS Y OUTPUT A	V72K1320X1	OFF		2 OF 3		6.9.10-4
038-07			CVFY	FCL	FWD THC POS Y OUTPUT B	V72K1340X1	OFF		2 OF 3		6.9.10-4
038-08			CVFY	FCL	FWD THC POS Y OUTPUT C	V72K1360X1	OFF		INHB	MSEQ	6.9.10-4
038-09			CVFY	FCL	FWD THC NEG Y OUTPUT A	V72K1321X1	OFF		2 OF 3		6.9.10-4
038-10			CVFY	FCL	FWD THC NEG Y OUTPUT B	V72K1341X1	OFF		2 OF 3		6.9.10-4
038-11			CVFY	FCL	FWD THC NEG Y OUTPUT C	V72K1361X1	OFF		INHB	MSEQ	6.9.10-4
038-12			CVFY	FCL	FWD THC POS Z OUTPUT A	V72K1325X1	OFF		2 OF 3		6.9.10-4
038-13			CVFY	FCL	FWD THC POS Z OUTPUT B	V72K1345X1	OFF		2 OF 3		6.9.10-4
038-14			CVFY	FCL	FWD THC POS Z OUTPUT C	V72K1365X1	OFF		INHB	MSEQ	6.9.10-4
038-15			CVFY	FCL	FWD THC NEG Z OUTPUT A	V72K1326X1	OFF		2 OF 3		6.9.10-4
038-16			CVFY	FCL	FWD THC NEG Z OUTPUT B	V72K1346X1	OFF		2 OF 3		6.9.10-4
038-17			CVFY	FCL	FWD THC NEG Z OUTPUT C	V72K1366X1	OFF		INHB	MSEQ	6.9.10-4
039-00			CVFY	FCL	FLIGHT CONTROL CHANNEL FAILURE	V72K4550X1	OFF		INHB	MENG	6.9.10-15
054-00			VFY	FCL	LEFT RUDDER PEDAL CMD A	V72K1530C1	3.6FD	DEG	INHB	MO09	6.9.10-6
054-01			VFY	FCL	LEFT RUDDER PEDAL CMD B	V72K1531C1	3.6FD	DEG	INHB	MO09	6.9.10-6
054-02			VFY	FCL	LEFT RUDDER PEDAL CMD C	V72K1532C1	3.6FD	DEG	INHB	MO09	6.9.10-6
054-03			VFY	FCL	RIGHT RUDDER PEDAL CMD A	V72K1540C1	3.6FD	DEG	INHB	MO09	6.9.10-6
054-04			VFY	FCL	RIGHT RUDDER PEDAL CMD B	V72K1541C1	3.6FD	DEG	INHB	MO09	6.9.10-6
054-05			VFY	FCL	RIGHT RUDDER PEDAL CMD C	V72K1542C1	3.6FD	DEG	INHB	MO09	6.9.10-6
105-00			ICL	FCL	BODY FLAP POSN FDBK-3	V57H0067C1					
105-01			ICL	FCL	BODY FLAP POSN FDBK-4	V57H0068C1					
105-02			ICL	FCL	L INBD ELEVON ATR CHAN 3 POSN	V58H0804A1					
105-03			ICL	FCL	L INBD ELEVON ATR CHAN 4 POSN	V58H0805A1					
105-04			ICL	FCL	L OUTBD ELEVON ATR CHAN 3 POSN	V58H0854A1					
105-05			ICL	FCL	L OUTBD ELEVON ATR CHAN 4 POSN	V58H0855A1					
105-06			ICL	FCL	R INBD ELEVON ACTR CHAN 3 POSN	V58H0904A1					
105-07			ICL	FCL	R INBD ELEVON ACTR CHAN 4 POSN	V58H0905A1					
105-08			ICL	FCL	R OUTBD ELEVON ACTR CHAN 3 POSN	V58H0954A1					





SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	
:	CD	:	:	:	:	DESIGNATOR	:	:	:	FACE	
:	CLOCK	:	:	:	:	SINGL	:	:	:	:	
:	:	:	:	:	:	OR	LO:HIGH	:	:	:	
:	:	:	:	:	:	:	UNIT	:	:	:	
:	:	:	:	:	:	:	:	:	:	:	
:	:	:	:	:	:	:	:	:	:	:	
180-36		CVFY	FCL	L	OUTBD ELEVON PRI DELTA PRESS 1	V58P0866C1	-230		PSID	INHB MSEQ	6.9.10-12
180-37		CVFY	FCL	L	OUTBD ELEVON PRI DELTA PRESS 2	V58P0867C1	-230		PSID	INHB MSEQ	6.9.10-12
180-38		CVFY	FCL	L	OUTBD ELEVON PRI DELTA PRESS 3	V58P0868C1	-230		PSID	INHB MSEQ	6.9.10-12
180-39		CVFY	FCL	L	OUTBD ELEVON PRI DELTA PRESS 4	V58P0869C1	-230		PSID	INHB MSEQ	6.9.10-12
181-00		VFY	FCL		RUDDER DELTA PRESS	SUM7	-350		PSID	INHB MSEQ	6.9.10-8
182-00		VFY	FCL		SPEEDBRAKE DELTA PRESS	SUM8	-350		PSID	INHB MSEQ	6.9.10-8
183-00		VFY	FCL	R	INBD ELEV SEC DELTA P	SUM9	-350		PSID	INHB MSEQ	6.9.10-13
184-00		VFY	FCL	R	OUTBD ELEV SEC DELTA P	SUM10	-350		PSID	INHB MSEQ	6.9.10-13
185-00		VFY	FCL	L	INBD ELEV SEC DELTA P	SUM11	-350		PSID	INHB MSEQ	6.9.10-13
186-00		VFY	FCL	L	OUTBD ELEV SEC DELTA P	SUM12	-350		PSID	INHB MSEQ	6.9.10-13
189-00		CVFY	FCL	MPS	ENG 1 P ACTR POSN	V58H1100A1	-1.12	.48	DEG	INHB MSEQ	6.9.10-20
189-01		CVFY	FCL	MPS	ENG 1 Y ACTR POSN	V58H1150A1	.98	-0.62	DEG	INHB MSEQ	6.9.10-20
189-02		CVFY	FCL	MPS	ENG 2 P ACTR POSN	V58H1200A1	1.12	-0.48	DEG	INHB MSEQ	6.9.10-20
189-03		CVFY	FCL	MPS	ENG 2 Y ACTR POSN	V58H1250A1	1.01	-0.59	DEG	INHB MSEQ	6.9.10-20
189-04		CVFY	FCL	MPS	ENG 3 P ACTR POSN	V58H1300A1	-1.12	.48	DEG	INHB MSEQ	6.9.10-20
189-05		CVFY	FCL	MPS	ENG 3 Y ACTR POSN	V58H1350A1	1.01	-0.59	DEG	INHB MSEQ	6.9.10-20
190-00		CVFY	FCL	L	INBD ELEVON ACTR CHAN 1 POSN	V58H0802A1	-0.52	1.18	DEG	INHB MSEQ	6.9.10-10
190-01		CVFY	FCL	L	INBD ELEVON ACTR CHAN 2 POSN	V58H0803A1	-0.52	1.18	DEG	INHB MSEQ	6.9.10-10
190-02		CVFY	FCL	L	INBD ELEVON ACTR CHAN 3 POSN	V58H0804A1	-0.52	1.18	DEG	INHB MSEQ	6.9.10-10
190-03		CVFY	FCL	L	INBD ELEVON ACTR CHAN 4 POSN	V58H0805A1	-0.52	1.18	DEG	INHB MSEQ	6.9.10-10
190-04		CVFY	FCL	L	OUTBD ELEVON ACTR CHAN 1 POSN	V58H0852A1	-0.36	1.34	DEG	INHB MSEQ	6.9.10-10
190-05		CVFY	FCL	L	OUTBD ELEVON ACTR CHAN 2 POSN	V58H0853A1	-0.36	1.34	DEG	INHB MSEQ	6.9.10-10
190-06		CVFY	FCL	L	OUTBD ELEVON ACTR CHAN 3 POSN	V58H0854A1	-0.36	1.34	DEG	INHB MSEQ	6.9.10-10
190-07		CVFY	FCL	L	OUTBD ELEVON ACTR CHAN 4 POSN	V58H0855A1	-0.36	1.34	DEG	INHB MSEQ	6.9.10-10
190-08		CVFY	FCL	R	INBD ELEVON ACTR CHAN 1 POSN	V58H0902A1	-0.52	1.18	DEG	INHB MSEQ	6.9.10-10
190-09		CVFY	FCL	R	INBD ELEVON ACTR CHAN 2 POSN	V58H0903A1	-0.52	1.18	DEG	INHB MSEQ	6.9.10-10
190-10		CVFY	FCL	R	INBD ELEVON ACTR CHAN 3 POSN	V58H0904A1	-0.52	1.18	DEG	INHB MSEQ	6.9.10-10
190-11		CVFY	FCL	R	INBD ELEVON ACTR CHAN 4 POSN	V58H0905A1	-0.52	1.18	DEG	INHB MSEQ	6.9.10-10
190-12		CVFY	FCL	R	OUTBD ELEVON ACTR CHAN 1 POSN	V58H0952A1	-0.36	1.34	DEG	INHB MSEQ	6.9.10-10
190-13		CVFY	FCL	R	OUTBD ELEVON ACTR CHAN 2 POSN	V58H0953A1	-0.36	1.34	DEG	INHB MSEQ	6.9.10-10
190-14		CVFY	FCL	R	OUTBD ELEVON ACTR CHAN 3 POSN	V58H0954A1	-0.36	1.34	DEG	INHB MSEQ	6.9.10-10
190-15		CVFY	FCL	R	OUTBD ELEVON ACTR CHAN 4 POSN	V58H0955A1	-0.36	1.34	DEG	INHB MSEQ	6.9.10-10
190-16		VFY	FCL		RUDDER ACTR CHAN 1 POSN	V57H0150A1	-0.95	0.95	DEG	INHB MSEQ	6.9.10-19
190-17		VFY	FCL		RUDDER ACTR CHAN 2 POSN	V57H0151A1	-0.95	0.95	DEG	INHB MSEQ	6.9.10-19
190-18		VFY	FCL		RUDDER ACTR CHAN 3 POSN	V57H0152A1	-0.95	0.95	DEG	INHB MSEQ	6.9.10-19
190-19		VFY	FCL		RUDDER ACTR CHAN 4 POSN	V57H0153A1	-0.95	0.95	DEG	INHB MSEQ	6.9.10-19
190-20		VFY	FCL		SPEEDBRAKE ACTR CHAN 1 POSN	V57H0250A1	2.45	7.55	DEG	INHB MSEQ	6.9.10-19
190-21		VFY	FCL		SPEEDBRAKE ACTR CHAN 2 POSN	V57H0251A1	2.45	7.55	DEG	INHB MSEQ	6.9.10-19
190-22		VFY	FCL		SPEEDBRAKE ACTR CHAN 3 POSN	V57H0252A1	2.45	7.55	DEG	INHB MSEQ	6.9.10-19
190-23		VFY	FCL		SPEEDBRAKE ACTR CHAN 4 POSN	V57H0253A1	2.45	7.55	DEG	INHB MSEQ	6.9.10-19
190-24		VFY	FCL		SELECTED BODY FLAP FDBK	V90H6410C1	-1.41	1.41	DEG	INHB MSEQ	6.9.10-18



SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
:	:	CD	:	:	:	:	:	:	:	:	:
:	CLOCK	E	:	:	:	OR LO	HIGH	UNIT	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:
701-57	VFY	FCL	MPS	ENG	1P	ACTR	B	FAIL		DISPLAY	
701-58	VFY	FCL	MPS	ENG	1Y	ACTR	B	FAIL		DISPLAY	
701-59	VFY	FCL	MPS	ENG	1P	ACTR	C	FAIL		DISPLAY	
701-60	VFY	FCL	MPS	ENG	1Y	ACTR	C	FAIL		DISPLAY	
701-61	VFY	FCL	MPS	ENG	1P	ACTR	D	FAIL		DISPLAY	
701-62	VFY	FCL	MPS	ENG	1Y	ACTR	D	FAIL		DISPLAY	
701-63	VFY	FCL	MPS	ENG	2P	ACTR	A	FAIL		DISPLAY	
701-64	VFY	FCL	MPS	ENG	2Y	ACTR	A	FAIL		DISPLAY	
701-65	VFY	FCL	MPS	ENG	2P	ACTR	B	FAIL		DISPLAY	
701-66	VFY	FCL	MPS	ENG	2Y	ACTR	B	FAIL		DISPLAY	
701-67	VFY	FCL	MPS	ENG	2P	ACTR	C	FAIL		DISPLAY	
701-68	VFY	FCL	MPS	ENG	2Y	ACTR	C	FAIL		DISPLAY	
701-69	VFY	FCL	MPS	ENG	2P	ACTR	D	FAIL		DISPLAY	
701-70	VFY	FCL	MPS	ENG	2Y	ACTR	D	FAIL		DISPLAY	
701-71	VFY	FCL	MPS	ENG	3P	ACTR	A	FAIL		DISPLAY	
701-72	VFY	FCL	MPS	ENG	3Y	ACTR	A	FAIL		DISPLAY	
701-73	VFY	FCL	MPS	ENG	3P	ACTR	B	FAIL		DISPLAY	
701-74	VFY	FCL	MPS	ENG	3Y	ACTR	B	FAIL		DISPLAY	
701-75	VFY	FCL	MPS	ENG	3P	ACTR	C	FAIL		DISPLAY	
701-76	VFY	FCL	MPS	ENG	3Y	ACTR	C	FAIL		DISPLAY	
701-77	VFY	FCL	MPS	ENG	3P	ACTR	D	FAIL		DISPLAY	
701-78	VFY	FCL	MPS	ENG	3Y	ACTR	D	FAIL		DISPLAY	
801-00	LABL	FCL									
802-00	CMD	FCL	INITIATE	AERO-SURFACE	DRIVE	CHEC					
803-00	VFY	FCL	L	INBD	ELEVON	ACTR	CHAN	1	POSN	NOHI	DEG
803-01	VFY	FCL	L	INBD	ELEVON	ACTR	CHAN	2	POSN	NOHI	DEG
803-02	VFY	FCL	L	INBD	ELEVON	ACTR	CHAN	3	POSN	NOHI	DEG
803-03	VFY	FCL	L	INBD	ELEVON	ACTR	CHAN	4	POSN	NOHI	DEG
803-04	VFY	FCL	L	OUTBD	ELEVON	ACTR	CHAN	1	POSN	NOHI	DEG
803-05	VFY	FCL	L	OUTBD	ELEVON	ACTR	CHAN	2	POSN	NOHI	DEG
803-06	VFY	FCL	L	OUTBD	ELEVON	ACTR	CHAN	3	POSN	NOHI	DEG
803-07	VFY	FCL	L	OUTBD	ELEVON	ACTR	CHAN	4	POSN	NOHI	DEG
803-08	VFY	FCL	R	INBD	ELEVON	ACTR	CHAN	1	POSN	NOHI	DEG
803-09	VFY	FCL	R	INBD	ELEVON	ACTR	CHAN	2	POSN	NOHI	DEG
803-10	VFY	FCL	R	INBD	ELEVON	ACTR	CHAN	3	POSN	NOHI	DEG
803-11	VFY	FCL	R	INBD	ELEVON	ACTR	CHAN	4	POSN	NOHI	DEG
803-12	VFY	FCL	R	OUTBD	ELEVON	ACTR	CHAN	1	POSN	NOHI	DEG
803-13	VFY	FCL	R	OUTBD	ELEVON	ACTR	CHAN	2	POSN	NOHI	DEG
803-14	VFY	FCL	R	OUTBD	ELEVON	ACTR	CHAN	3	POSN	NOHI	DEG
803-15	VFY	FCL	R	OUTBD	ELEVON	ACTR	CHAN	4	POSN	NOHI	DEG
803-16	VFY	FCL	RUDDER	ACTR	CHAN	1	POSN			NOHI	DEG

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI S9CC5 - L

SEQ	TIME	FUNCTION	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
:S	:I	:DISC		:SINGL			:PAGE	
:CD	:T	:		:OR	LO:HIGH	:UNIT	:	:F
:CLOCK	:E	:		:	:	:	:	:D

803-17	VFY	FCL	RUDDER ACTR CHAN 2 POSN	V57H0151A1 1	NOHI	DEG	1 OF 4	
803-18	VFY	FCL	RUDDER ACTR CHAN 3 POSN	V57H0152A1 1	NOHI	DEG	1 OF 4	
803-19	VFY	FCL	RUDDER ACTR CHAN 4 POSN	V57H0153A1 1	NOHI	DEG	INHB MSEQ	
803-20	VFY	FCL	SPEEDBRAKE ACTR CHAN 1 POSN	V57H0250A1 6	NOHI	DEG	1 OF 4	
803-21	VFY	FCL	SPEEDBRAKE ACTR CHAN 2 POSN	V57H0251A1 6	NOHI	DEG	1 OF 4	
803-22	VFY	FCL	SPEEDBRAKE ACTR CHAN 3 POSN	V57H0252A1 6	NOHI	DEG	1 OF 4	
803-23	VFY	FCL	SPEEDBRAKE ACTR CHAN 4 POSN	V57H0253A1 6	NOHI	DEG	INHB MSEQ	
803-24	VFY	FCL	SELECTED BODY FLAP FDBK	V9CH6410C1 1-5	NOHI	DEG	INHB MSEQ	
804-00	VFY	FCL	L INBD ELEVON ACTR CHAN 1 POSN	V58H0802A1 NOL0	-1	DEG	1 OF 4	
804-01	VFY	FCL	L INBD ELEVON ACTR CHAN 2 POSN	V58H0803A1 NOL0	-1	DEG	1 OF 4	
804-02	VFY	FCL	L INBD ELEVON ACTR CHAN 3 POSN	V58H0804A1 NOL0	-1	DEG	1 OF 4	
804-03	VFY	FCL	L INBD ELEVON ACTR CHAN 4 POSN	V58H0805A1 NOL0	-1	DEG	INHB MSEQ	
804-04	VFY	FCL	L OUTBD ELEVON ACTR CHAN 1 POSN	V58H0852A1 NOL0	-1	DEG	1 OF 4	
804-05	VFY	FCL	L OUTBD ELEVON ACTR CHAN 2 POSN	V58H0853A1 NOL0	-1	DEG	1 OF 4	
804-06	VFY	FCL	L OUTBD ELEVON ACTR CHAN 3 POSN	V58H0854A1 NOL0	-1	DEG	1 OF 4	
804-07	VFY	FCL	L OUTBD ELEVON ACTR CHAN 4 POSN	V58H0855A1 NOL0	-1	DEG	INHB MSEQ	
804-08	VFY	FCL	R INBD ELEVON ACTR CHAN 1 POSN	V58H0902A1 NOL0	-1	DEG	1 OF 4	
804-09	VFY	FCL	R INBD ELEVON ACTR CHAN 2 POSN	V58H0903A1 NOL0	-1	DEG	1 OF 4	
804-10	VFY	FCL	R INBD ELEVON ACTR CHAN 3 POSN	V58H0904A1 NOL0	-1	DEG	1 OF 4	
804-11	VFY	FCL	R INBD ELEVON ACTR CHAN 4 POSN	V58H0905A1 NOL0	-1	DEG	INHB MSEQ	
804-12	VFY	FCL	R OUTBD ELEVON ACTR CHAN 1 POSN	V58H0952A1 NOL0	-1	DEG	1 OF 4	
804-13	VFY	FCL	R OUTBD ELEVON ACTR CHAN 2 POSN	V58H0953A1 NOL0	-1	DEG	1 OF 4	
804-14	VFY	FCL	R OUTBD ELEVON ACTR CHAN 3 POSN	V58H0954A1 NOL0	-1	DEG	1 OF 4	
804-15	VFY	FCL	R OUTBD ELEVON ACTR CHAN 4 POSN	V58H0955A1 NOL0	-1	DEG	INHB MSEQ	
804-16	VFY	FCL	RUDDER ACTR CHAN 1 POSN	V57H0150A1 NOL0	-1	DEG	1 OF 4	
804-17	VFY	FCL	RUDDER ACTR CHAN 2 POSN	V57H0151A1 NOL0	-1	DEG	1 OF 4	
804-18	VFY	FCL	RUDDER ACTR CHAN 3 POSN	V57H0152A1 NOL0	-1	DEG	1 OF 4	
804-19	VFY	FCL	RUDDER ACTR CHAN 4 POSN	V57H0153A1 NOL0	-1	DEG	INHB MSEQ	
804-20	VFY	FCL	SPEEDBRAKE ACTR CHAN 1 POSN	V57H0250A1 NOL0	4	DEG	1 OF 4	
804-21	VFY	FCL	SPEEDBRAKE ACTR CHAN 2 POSN	V57H0251A1 NOL0	4	DEG	1 OF 4	
804-22	VFY	FCL	SPEEDBRAKE ACTR CHAN 3 POSN	V57H0252A1 NOL0	4	DEG	1 OF 4	
804-23	VFY	FCL	SPEEDBRAKE ACTR CHAN 4 POSN	V57H0253A1 NOL0	4	DEG	INHB MSEQ	
804-24	VFY	FCL	SELECTED BODY FLAP FDBK	V9CH6410C1 NOL0	-1-5	DEG	INHB MSEQ	
805-00	VFY	FCL	L INBD ELEVON ACTR CHAN 1 POSN	V58H0802A1 -52	1-18	DEG	1 OF 4	
805-01	VFY	FCL	L INBD ELEVON ACTR CHAN 2 POSN	V58H0803A1 -52	1-18	DEG	1 OF 4	
805-02	VFY	FCL	L INBD ELEVON ACTR CHAN 3 POSN	V58H0804A1 -52	1-18	DEG	1 OF 4	
805-03	VFY	FCL	L INBD ELEVON ACTR CHAN 4 POSN	V58H0805A1 -52	1-18	DEG	INHB MSEQ	
805-04	VFY	FCL	L OUTBD ELEVON ACTR CHAN 1 POSN	V58H0852A1 -36	1-34	DEG	1 OF 4	
805-05	VFY	FCL	L OUTBD ELEVON ACTR CHAN 2 POSN	V58H0853A1 -36	1-34	DEG	1 OF 4	
805-06	VFY	FCL	L OUTBD ELEVON ACTR CHAN 3 POSN	V58H0854A1 -36	1-34	DEG	1 OF 4	
805-07	VFY	FCL	L OUTBD ELEVON ACTR CHAN 4 POSN	V58H0855A1 -36	1-34	DEG	INHB MSEQ	

SEQ	I	TIME	CD	FUNCTION	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	CLOCK	:	DESIGNATOR	:	:	SINGL	:	:	:	:	:
:	:	:	:	:	:	:	:	OR LO:HIGH	:	:	:	:
:	:	:	:	:	:	:	:	UNIT	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:
805-08	VFY	FCL	R	INBD	ELEVON	ACTR CHAN 1 POSN	V58H0902A1	-0.52	1.18	DEG	1 OF 4	
805-09	VFY	FCL	R	INBD	ELEVON	ACTR CHAN 2 POSN	V58H0903A1	-0.52	1.18	DEG	1 OF 4	
805-10	VFY	FCL	R	INBD	ELEVON	ACTR CHAN 3 POSN	V58H0904A1	-0.52	1.18	DEG	1 OF 4	
805-11	VFY	FCL	R	INBD	ELEVON	ACTR CHAN 4 POSN	V58H0905A1	-0.52	1.18	DEG	INHB MSEQ	
805-12	VFY	FCL	R	OUTBD	ELEVON	ACTR CHAN 1 POSN	V58H0952A1	-0.36	1.34	DEG	1 OF 4	
805-13	VFY	FCL	R	OUTBD	ELEVON	ACTR CHAN 2 POSN	V58H0953A1	-0.36	1.34	DEG	1 OF 4	
805-14	VFY	FCL	R	OUTBD	ELEVON	ACTR CHAN 3 POSN	V58H0954A1	-0.36	1.34	DEG	1 OF 4	
805-15	VFY	FCL	R	OUTBD	ELEVON	ACTR CHAN 4 POSN	V58H0955A1	-0.36	1.34	DEG	INHB MSEQ	
805-16	VFY	FCL	R	UDDER	ACTR CHAN 1 POSN	V57H0150A1	-0.95	0.95	DEG	1 OF 4		
805-17	VFY	FCL	R	UDDER	ACTR CHAN 2 POSN	V57H0151A1	-0.95	0.95	DEG	1 OF 4		
805-18	VFY	FCL	R	UDDER	ACTR CHAN 3 POSN	V57H0152A1	-0.95	0.95	DEG	1 OF 4		
805-19	VFY	FCL	R	UDDER	ACTR CHAN 4 POSN	V57H0153A1	-0.95	0.95	DEG	INHB MSEQ		
805-20	VFY	FCL	R	SPEEDBRAKE	ACTR CHAN 1 POSN	V57H0250A1	2.45	7.55	DEG	1 OF 4		
805-21	VFY	FCL	R	SPEEDBRAKE	ACTR CHAN 2 POSN	V57H0251A1	2.45	7.55	DEG	1 OF 4		
805-22	VFY	FCL	R	SPEEDBRAKE	ACTR CHAN 3 POSN	V57H0252A1	2.45	7.55	DEG	1 OF 4		
805-23	VFY	FCL	R	SPEEDBRAKE	ACTR CHAN 4 POSN	V57H0253A1	2.45	7.55	DEG	INHB MSEQ		
805-24	VFY	FCL	R	SELECTED	BODY FLAP	FDBK	V90H6410C1	-1.41	1.41	DEG	INHB MSEQ	
806-00	LABL	FCL					P002					
807-00	CMD	FCL		INITIATE	MPS	GIMBAL CHECK	CMD-LS	ON				
808-00	VFY	FCL	MPS	ENG 1	P	ACTR POSN	V58H1100A1	4.5	7.5	DEG	INHB MSEQ	
808-01	VFY	FCL	MPS	ENG 1	Y	ACTR POSN	V58H1150A1	4.5	7.5	DEG	INHB MSEQ	
808-02	VFY	FCL	MPS	ENG 2	P	ACTR POSN	V58H1200A1	4.5	7.5	DEG	INHB MSEQ	
808-03	VFY	FCL	MPS	ENG 2	Y	ACTR POSN	V58H1250A1	4.5	7.5	DEG	INHB MSEQ	
808-04	VFY	FCL	MPS	ENG 3	P	ACTR POSN	V58H1300A1	4.5	7.5	DEG	INHB MSEQ	
808-05	VFY	FCL	MPS	ENG 3	Y	ACTR POSN	V58H1350A1	4.5	7.5	DEG	INHB MSEQ	
809-00	VFY	FCL	MPS	ENG 1	P	ACTR POSN	V58H1100A1	-7.5	-4.5	DEG	INHB MSEQ	
809-01	VFY	FCL	MPS	ENG 1	Y	ACTR POSN	V58H1150A1	-7.5	-4.5	DEG	INHB MSEQ	
809-02	VFY	FCL	MPS	ENG 2	P	ACTR POSN	V58H1200A1	-7.5	-4.5	DEG	INHB MSEQ	
809-03	VFY	FCL	MPS	ENG 2	Y	ACTR POSN	V58H1250A1	-7.5	-4.5	DEG	INHB MSEQ	
809-04	VFY	FCL	MPS	ENG 3	P	ACTR POSN	V58H1300A1	-7.5	-4.5	DEG	INHB MSEQ	
809-05	VFY	FCL	MPS	ENG 3	Y	ACTR POSN	V58H1350A1	-7.5	-4.5	DEG	INHB MSEQ	
001-00	CVFY	FCP	PRSD	02	TK 1	HTR CUR SENR 1A-TRI	V45X1185E1	OFF			2 OF 2	6.5.1-6
001-01	CVFY	FCP	PRSD	02	TK 1	HTR CUR SENR 1B-TRI	V45X1187E1	OFF			OR	6.5.1-6
001-02	CVFY	FCP	PRSD	02	TK 1	HTR CUR SENR 2A-TRI	V45X1186E1	OFF			2 OF 2	6.5.1-6
001-03	CVFY	FCP	PRSD	02	TK 1	HTR CUR SENR 2B-TRI	V45X1188E1	OFF			LCC-3	6.5.1-6
001-04	CVFY	FCP	PRSD	02	TK 2	HTR CUR SENR 1A-TRI	V45X1285E1	OFF			2 OF 2	6.5.1-6
001-05	CVFY	FCP	PRSD	02	TK 2	HTR CUR SENR 1B-TRI	V45X1287E1	OFF			OR	6.5.1-6
001-06	CVFY	FCP	PRSD	02	TK 2	HTR CUR SENR 2A-TRI	V45X1286E1	OFF			2 OF 2	6.5.1-6
001-07	CVFY	FCP	PRSD	02	TK 2	HTR CUR SENR 2B-TRI	V45X1288E1	OFF			LCC-3	6.5.1-6
001-08	CVFY	FCP	PRSD	02	TK 3	HTR CUR SENR 1A-TRI	V45X1385E1	OFF			2 OF 2	AS
001-09	CVFY	FCP	PRSD	02	TK 3	HTR CUR SENR 1B-TRI	V45X1387E1	OFF			OR	AS

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
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CD	CLOCK	E	:	:	:	DESIGNATOR	LO	HIGH	UNIT	PAGE
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001-10	CVFY FCP				PRSD 02 TK 3 HTR CUR SENR 2A-TRI	V45X1386E1 OFF		2 OF 2		6.5.1-6 AS
001-11	CVFY FCP				PRSD 02 TK 3 HTR CUR SENR 2B-TRI	V45X1388E1 OFF		LCC-3		6.5.1-6 AS
001-12	CVFY FCP				PRSD 02 TK 4 HTR CUR SENR 1A-TRI	V45X1485E1 OFF		2 OF 2		6.5.1-6 AS
001-13	CVFY FCP				PRSD 02 TK 4/5 HTR CUR SENR 1B/1A	V45X1487E1 OFF		OR		6.5.1-6 AS
001-14	CVFY FCP				PRSD 02 TK 4 HTR CUR SENR 2A-TRI	V45X1486E1 OFF		2 OF 2		6.5.1-6 AS
001-15	CVFY FCP				PRSD 02 TK 4/5 HTR CUR SENR 2B/2A	V45X1488E1 OFF		LCC-3		6.5.1-6 AS
001-20	CVFY FCP				PRSD FCP 1 02 REAC VLV - OPEN	V45X1150E1 ON		LCC-3		6.5.1-5
001-21	CVFY FCP				PRSD FCP 1 H2 REAC VLV - OPEN	V45X2150E1 ON		LCC-3		6.5.1-5
001-22	CVFY FCP				PRSD FCP 2 02 REAC VLV - OPEN	V45X1155E1 ON		LCC-3		6.5.1-5
001-23	CVFY FCP				PRSD FCP 2 H2 REAC VLV - OPEN	V45X2155E1 ON		LCC-3		6.5.1-5
001-24	CVFY FCP				PRSD FCP 3 02 REAC VLV - OPEN	V45X1160E1 ON		LCC-3		6.5.1-5
001-25	CVFY FCP				PRSD FCP 3 H2 REAC VLV - OPEN	V45X2160E1 ON		LCC-3		6.5.1-5
001-26	CVFY FCP				FUEL CELL NO. 1 COOLANT PRESSURE	V45P0147A1 55	75	PSIA		6.5.2-4
001-27	CVFY FCP				FUEL CELL NO. 2 COOLANT PRESSURE	V45P0247A1 55	75	PSIA		6.5.2-4
001-28	CVFY FCP				FUEL CELL NO. 3 COOLANT PRESSURE	V45P0347A1 55	75	PSIA		6.5.2-4
001-29	CVFY FCP				FUEL CELL NO. 1 COOLANT PUMP STAT	V45X0143E1 ON		LCC-3		6.5.2-8
001-30	CVFY FCP				FUEL CELL NO. 2 COOLANT PUMP STAT	V45X0243E1 ON		LCC-3		6.5.2-8
001-31	CVFY FCP				FUEL CELL NO. 3 COOLANT PUMP STAT	V45X0343E1 ON		LCC-3		6.5.2-8
001-32	CVFY FCP				FC1 H20 RELIEF NOZZLE TEMP B	V45T0456A1 157	235	DEGF	LCC-1	6.5.2-10
001-33	CVFY FCP				FC1 H20 RELIEF VALVE TEMP	V45T0412A1 65	NOHI	DEGF	2 OF 3	6.5.2-10
001-34	CVFY FCP				FC2 H20 RELIEF VALVE TEMP	V45T0422A1 65	NOHI	DEGF	2 OF 3	6.5.2-10
001-35	CVFY FCP				FC3 H20 RELIEF VALVE TEMP	V45T0432A1 65	NOHI	DEGF	LCC-1	6.5.2-10
001-36	CVFY FCP				H20 RELIEF LINE TEMP	V45T0450A1 65	NOHI	DEGF	LCC-1	6.5.2-10
001-37	CVFY FCP				FCP NO 1 SUBSTACK 1 DELTA VOLTAGE	V45V0102A1 N0L0	150	MV	LCC-1	6.5.2-7A
001-38	CVFY FCP				FCP NO 1 SUBSTACK 2 DELTA VOLTAGE	V45V0103A1 N0L0	150	MV	LCC-1	6.5.2-7A
001-39	CVFY FCP				FCP NO 1 SUBSTACK 3 DELTA VOLTAGE	V45V0104A1 N0L0	150	MV	LCC-1	6.5.2-7A
001-40	CVFY FCP				FCP NO 2 SUBSTACK 1 DELTA VOLTAGE	V45V0202A1 N0L0	150	MV	LCC-1	6.5.2-7A
001-41	CVFY FCP				FCP NO 2 SUBSTACK 2 DELTA VOLTAGE	V45V0203A1 N0L0	150	MV	LCC-1	6.5.2-7A
001-42	CVFY FCP				FCP NO 2 SUBSTACK 3 DELTA VOLTAGE	V45V0204A1 N0L0	150	MV	LCC-1	6.5.2-7A
001-43	CVFY FCP				FCP NO 3 SUBSTACK 1 DELTA VOLTAGE	V45V0302A1 N0L0	150	MV	LCC-1	6.5.2-7A
001-44	CVFY FCP				FCP NO 3 SUBSTACK 2 DELTA VOLTAGE	V45V0303A1 N0L0	150	MV	LCC-1	6.5.2-7A
001-45	CVFY FCP				FCP NO 3 SUBSTACK 3 DELTA VOLTAGE	V45V0304A1 N0L0	150	MV	LCC-1	6.5.2-7A
010-19	CVFY FCP				FUEL CELL NO 1 VOLTAGE	V45V0100A1 N0L0	32.0	V	LCC-3	6.5.2-2 PL
010-21	CVFY FCP				FUEL CELL NO 2 VOLTAGE	V45V0200A1 N0L0	32.0	V	LCC-3	6.5.2-2 PL
010-23	CVFY FCP				FUEL CELL NO 3 VOLTAGE	V45V0300A1 N0L0	32.0	V	LCC-3	6.5.2-2 PL
109-00	ICL FCP				PRSD 02 TK 1 HTR ASSY 1	V45X1106E1				
109-01	ICL FCP				PRSD 02 TK 1 HTR ASSY 1 TEMP	V45T1107A1				AS
109-02	ICL FCP				PRSD 02 TK 1 HTR B1-ON	V45X1108E1				
109-03	ICL FCP				PRSD 02 TK 1 HTR ASSY 2	V45T1109A1				AS
109-04	ICL FCP				PRSD 02 TK 1 HTR A2-ON	V45X1111E1				
109-05	ICL FCP				PRSD 02 TK 1 HTR B2-ON	V45X1113E1				

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
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109-06		ICL	FCP		PRSD 02 TK 2 HTR A1-ON		V45X1206E1				AS
109-07		ICL	FCP		PRSD 02 TK 2 HTR ASSY 1 TEMP		V45T1207A1				AS
109-08		ICL	FCP		PRSD 02 TK 2 HTR B1-ON		V45X1208E1				AS
109-09		ICL	FCP		PRSD 02 TK 2 HTR ASSY 2 TEMP		V45T1209A1				AS
109-10		ICL	FCP		PRSD 02 TK 2 HTR A2-ON		V45X1211E1				AS
109-11		ICL	FCP		PRSD 02 TK 2 HTR B2-ON		V45X1213E1				AS
109-12		ICL	FCP		PRSD H2 TK 1 HTR ASSY TEMP		V45T2107A1				AS
109-13		ICL	FCP		PRSD H2 TK 1 HTR A-ON		V45X2106E1				AS
109-14		ICL	FCP		PRSD H2 TK 1 HTR B-ON		V45X2108E1				AS
109-15		ICL	FCP		PRSD H2 TK 2 HTR ASSY TEMP		V45T2207A1				AS
109-16		ICL	FCP		PRSD H2 TK 2 HEATER A-ON		V45X2206E1				AS
109-17		ICL	FCP		PRSD H2 TK 2 HEATER B-ON		V45X2208E1				AS
109-18		ICL	FCP		PRSD 02 TK 3 HTR ASSY 1 TEMP(MBK)		V45T1307A1				AS
109-19		ICL	FCP		PRSD 02 TK 3 HTR ASSY 2 TEMP(MBK)		V45T1309A1				AS
109-20		ICL	FCP		PRSD 02 TK 3 HTR A1-ON (MBK)		V45X1306E1				AS
109-21		ICL	FCP		PRSD 02 TK 3 HTR B1-ON (MBK)		V45X1308E1				AS
109-22		ICL	FCP		PRSD 02 TK 3 HTR A2-ON (MBK)		V45X1311E1				AS
109-23		ICL	FCP		PRSD 02 TK 3 HTR B2-ON (MBK)		V45X1313E1				AS
109-24		ICL	FCP		PRSD H2 TK 3 HTR ASSY TEMP(MBK)		V45T2307A1				AS
109-25		ICL	FCP		PRSD H2 TK 3 HTR A-ON(MBK)		V45X2306E1				AS
109-26		ICL	FCP		PRSD H2 TK 3 HTR B-ON(MBK)		V45X2308E1				AS
109-27		ICL	FCP		PRSD 02 TK 4 HTR ASSY 1 TEMP(MBK)		V45T1407A1				AS
109-28		ICL	FCP		PRSD 02 TK 4 HTR ASSY 2 TEMP(MBK)		V45T1409A1				AS
109-29		ICL	FCP		PRSD 02 TK 4 HTR A1-ON (MBK)		V45X1406E1				AS
109-30		ICL	FCP		PRSD 02 TK 4 HTR A2-ON (MBK)		V45X1411E1				AS
109-31		ICL	FCP		PRSD H2 TK 4 HTR ASSY TEMP(MBK)		V45T2407A1				AS
109-32		ICL	FCP		PRSD H2 TK 5 HTR A-ON (MBK)		V45X2456E1				AS
109-33		ICL	FCP		PRSD H2 TK 5 HTR B-ON (MBK)		V45X2458E1				AS
109-34		ICL	FCP		PRSD 02 TK 5 HTR ASSY 1 TEMP(MBK)		V45T1507A1				PL
109-35		ICL	FCP		PRSD 02 TK 5 HTR ASSY 2 TEMP(MBK)		V45T1509A1				PL
109-36		ICL	FCP		PRSD 02 TK 4/5 HTR B1/A1-ON		V45X1408E1				PL
109-37		ICL	FCP		PRSD 02 TK 4/5 HTR B2/A2-ON		V45X1413E1				PL
109-38		ICL	FCP		PRSD H2 TK 5 HTR ASSY TEMP(MBK)		V45T2507A1				AS
117-00		ACL	FCP		PRSD FCP 1 02 REAC VLV-OPEN		V45X1150E1				PL
117-01		ACL	FCP		PRSD FCP 2 02 REAC VLV-OPEN		V45X1155E1				PL
117-02		ACL	FCP		PRSD FCP 3 02 REAC VLV-OPEN		V45X1160E1				PL
117-03		ACL	FCP		PRSD FCP 1 H2 REAC VLV-OPEN		V45X2150E1				PL
117-04		ACL	FCP		PRSD FCP 2 H2 REAC VLV-OPEN		V45X2155E1				PL
117-05		ACL	FCP		PRSD FCP 3 H2 REAC VLV-OPEN		V45X2160E1				PL
205-00		CMD	FCP		PRSD 02 GAS SUPPLY VLV - CLOSE		V45K1196NL ON				AS
205-01		CMD	FCP		PRSD H2 GAS SUPPLY VLV - CLOSE		V45K2196NL ON				AS



SEQ	TIME	CD	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	INHB	MSEQ
207-00	VFY	FCP	PRSD	02	GAS SPLY VLV - CLOSED	V45X1195E1 ON				INHB	MSEQ
207-01	VFY	FCP	PRSD	H2	GAS SPLY VLV - CLOSED	V45X2195E1 ON					6.5.1-7
210-00	CMD	FCP	T-0	POD	ACT VLV CLOSE ENABLE	GFHK3546E ON					6.5.1-7
210-01	CMD	FCP	T-0	POD	ACT VLV CLOSE CMD	GFHK3547E ON					
210-02	CMD	FCP	T-0	POD	ACT VLV CLOSE ENABLE	GFOK1546E ON					
210-03	CMD	FCP	T-0	POD	ACT VLV CLOSE CMD	GFOK1547E ON					
210-04	CMD	FCP	PRSD	02	GAS SUPPLY VLV-CLOSE	V45K1196NL OFF					
210-05	CMD	FCP	PRSD	H2	GAS SUPPLY VLV-CLOSE	V45K2196NL OFF					
212-00	CMD	FCP	259	PSI	GH2/GHE SUP VLV CLOSE CM	GFHK3550E ON					
212-02	CMD	FCP	PRIM	GH2	T-0 VENT VLV OPEN CM	GFHK3110E ON					
212-03	CMD	FCP	GH2	VENT	ISO VLV CLOSE CMD	GFHK3520E OFF					
212-04	K	CMD	6000	PSI	GH2 SUPPLY VLV CLOSE CM	GFHK307CE ON					
212-05	V	CMD	6000	PSI	GH2 SUPPLY VLV CLOSE CM	GFHK3040E ON					
212-06		CMD	FCP	6000	PSI SUPPLY VLV CLOSE	GFOK1070E ON					
212-07		CMD	FCP	915	PSI SUPPLY VLV CLOSE	GFOK1550E ON					
212-09		CMD	FCP	PRIM	G02 T-0 VLV OPEN	GFOK1110E ON					
212-10		CMD	FCP	G02	VENT ISO VOV CLOSE CMD	GFOK1520E OFF					
212-11		CMD	FCP	T-0	POD ACT VLV CLOSE ENABLE	GFHK3546E OFF					
212-12		CMD	FCP	T-0	POD ACT VLV CLOSE CMD	GFHK3547E OFF					
212-13		CMD	FCP	T-0	POD ACT VLV CLOSE ENABLE	GFCK1546E OFF					
212-14		CMD	FCP	T-0	POD ACT VLV CLOSE CMD	GFCK1547E OFF					
248-00		ICL	FCP	PRSD	FCP 1 02 REAC VLV - OPEN	V45X1150E1 OFF					
248-01		ICL	FCP	PRSD	FCP 1 H2 REAC VLV - OPEN	V45X2150E1 OFF					
248-02		ICL	FCP	PRSD	FCP 2 02 REAC VLV - OPEN	V45X1155E1 OFF					
248-03		ICL	FCP	PRSD	FCP 2 H2 REAC VLV - OPEN	V45X2155E1 OFF					
248-04		ICL	FCP	PRSD	FCP 3 02 REAC VLV - OPEN	V45X1160E1 OFF					
248-05		ICL	FCP	PRSD	FCP 3 H2 REAC VLV - OPEN	V45X2160E1 OFF					
702-05		END	6002								
703-05		END	6003								
704-05		END	6004								
705-03		END	6005								
706-14	JT12	END	6006								
707-14	ST12	END	6007								
708-14	ST12	END	6008								
709-14	ST12	END	6009								
710-14	ST12	END	6010								
711-14	ST12	END	6011								
712-02		END	6012								
713-20		END	6013								
713-22		END	6013								
714-12		END	6014								

DATE 12-10-85

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OML 890C5 - L

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	SINGL	VALUE	ELSE	DURATION	LCC
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715-06	ST12	END	G015								
717-08	ST20	END	G017								
003-00		CVFY	GNS	IMU 1	GOOD	V71X2021B1	ON		LCC-3		6.5.10-26
003-01		CVFY	GNS	IMU 2	GOOD	V71X3021B1	ON		LCC-3		6.5.10-26
003-02		CVFY	GNS	IMU 3	GOOD	V71X4021B1	ON		LCC-3		6.5.10-26
003-03		CVFY	GNS	IMU 1	REDUNDANT RATE FAIL	V95X0033X1	OFF		LCC-3		6.5.10-32
003-04		CVFY	GNS	IMU 1	INNER RESOLVER NULL FAIL	V95X0034X1	OFF		LCC-3		6.5.10-32
003-05		CVFY	GNS	IMU 1	VELOCITY LIMIT FAIL	V95X0035X1	OFF		LCC-3		6.5.10-32
003-06		CVFY	GNS	IMU 1	RESOLVER LIMIT FAIL	V95X0037X1	OFF		LCC-3		6.5.10-32
003-07		CVFY	GNS	IMU 1	PLATFORM TEMP SAFE	V71X2405X1	ON		LCC-3		6.5.10-29
003-08		CVFY	GNS	IMU 1	CAPRI TEMP SAFE	V71X2407X1	ON		LCC-3		6.5.10-29
003-09		CVFY	GNS	IMU 2	REDUNDANT RATE FAIL	V95X1033X1	OFF		LCC-3		6.5.10-32
003-10		CVFY	GNS	IMU 2	INNER RESOLVER NULL FAIL	V95X1034X1	OFF		LCC-3		6.5.10-32
003-11		CVFY	GNS	IMU 2	VELOCITY LIMIT FAIL	V95X1035X1	OFF		LCC-3		6.5.10-32
003-12		CVFY	GNS	IMU 2	RESOLVER LIMIT FAIL	V95X1037X1	OFF		LCC-3		6.5.10-32
003-13		CVFY	GNS	IMU 2	PLATFORM TEMP SAFE	V71X3405X1	ON		LCC-3		6.5.10-29
003-14		CVFY	GNS	IMU 2	CAPRI TEMP SAFE	V71X3407X1	ON		LCC-3		6.5.10-29
003-15		CVFY	GNS	IMU 3	REDUNDANT RATE FAIL	V95X2033X1	OFF		LCC-3		6.5.10-32
003-16		CVFY	GNS	IMU 3	INNER RESOLVER NULL FAIL	V95X2034X1	OFF		LCC-3		6.5.10-32
003-17		CVFY	GNS	IMU 3	VELOCITY LIMIT FAIL	V95X2035X1	OFF		LCC-3		6.5.10-32
003-18		CVFY	GNS	IMU 3	RESOLVER LIMIT FAIL	V95X2037X1	OFF		LCC-3		6.5.10-32
003-19		CVFY	GNS	IMU 3	PLATFORM TEMP SAFE	V71X4405X1	ON		LCC-3		6.5.10-29
003-20		CVFY	GNS	IMU 3	CAPRI TEMP SAFE	V71X4407X1	ON		LCC-3		6.5.10-29
003-21		CVFY	GNS	IMU FAILURE		V72X4560X1	OFF		LCC-3		
003-22		CVFY	GNS	IMU 1	WORD 13 ECHO FAIL	V95X0030X1	OFF		LCC-3		6.5.10-32
003-23		CVFY	GNS	IMU 2	WORD 13 ECHO FAIL	V95X1030X1	OFF		LCC-3		6.5.10-32
003-24		CVFY	GNS	IMU 3	WORD 13 ECHO FAIL	V95X2030X1	OFF		LCC-3		6.5.10-32
003-25		CVFY	GNS	IMU 1	PLATFORM TEMP READY	V71X2404X1	ON		LCC-3		6.5.10-28
003-26		CVFY	GNS	IMU 1	CAPRI TEMP READY	V71X2406X1	ON		LCC-3		6.5.10-28
003-27		CVFY	GNS	IMU 2	PLATFORM TEMP READY	V71X3404X1	ON		LCC-3		6.5.10-28
003-28		CVFY	GNS	IMU 2	CAPRI TEMP READY	V71X3406X1	ON		LCC-3		6.5.10-28
003-29		CVFY	GNS	IMU 3	PLATFORM TEMP READY	V71X4404X1	ON		LCC-3		6.5.10-28
003-30		CVFY	GNS	IMU 3	CAPRI TEMP READY	V71X4406X1	ON		LCC-3		6.5.10-28
003-31		CVFY	GNS	IMU 1	WORD 14 ECHO FAIL	V95X0031X1	OFF		LCC-3		6.5.10-32
003-32		CVFY	GNS	IMU 2	WORD 14 ECHO FAIL	V95X1031X1	OFF		LCC-3		6.5.10-32
003-33		CVFY	GNS	IMU 3	WORD 14 ECHO FAIL	V95X2031X1	OFF		LCC-3		6.5.10-32
004-00		CVFY	GNS	GA 1	ROLL SRMD IND	V79X1860X1	ON		LCC-3		6.5.10-41
004-01		CVFY	GNS	GA 1	PITCH SRMD IND	V79X1861X1	ON		LCC-3		6.5.10-41
004-02		CVFY	GNS	GA 2	ROLL SRMD IND	V79X1862X1	ON		LCC-3		6.5.10-41
004-03		CVFY	GNS	GA 2	ROLL SRMD IND	V79X1865X1	ON		LCC-3		6.5.10-41
004-04		CVFY	GNS	GA 2	PITCH SRMD IND	V79X1866X1	ON		LCC-3		6.5.10-41

SEQ	TIME	CD	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
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004-05	CVFY GNS	GA 2	YAW SMRD	IND	V79X1867X1	ON		LCC-3		6.9.10-41	
004-06	CVFY GNS	GA 3	ROLL SMRD	IND	V79X1870X1	ON		LCC-3		6.9.10-41	
004-07	CVFY GNS	GA 3	PITCH SMRD	IND	V79X1871X1	ON		LCC-3		6.9.10-41	
004-08	CVFY GNS	GA 3	YAW SMRD	IND	V79X1872X1	ON		LCC-3		6.9.10-41	
004-09	CVFY GNS	GA 4	ROLL SMRD	IND	V79X1875X1	ON		LCC-3		6.9.10-41	
004-10	CVFY GNS	GA 4	PITCH SMRD	IND	V79X1876X1	ON		LCC-3		6.9.10-41	
004-11	CVFY GNS	GA 4	YAW SMRD	IND	V79X1877X1	ON		LCC-3		6.9.10-41	
023-03	VFY GNS		PREFLIGHT ALIGN	COMPLETE	V95X0010X1	ON		WAIT			
036-00	CVFY GNS	IMU 1	FAIL		V90X2601X1	OFF		INHB MSEQ		6.9.10-31	
036-01	CVFY GNS	IMU 2	FAIL		V90X2701X1	OFF		INHB MSEQ		6.9.10-31	
036-02	CVFY GNS	IMU 3	FAIL		V9CX2801X1	OFF		INHB MSEQ		6.9.10-31	
036-03	CVFY GNS	GA 1	FAIL		V9CX54C1X1	OFF		INHB MSEQ		6.9.10-43	
036-04	CVFY GNS	GA 2	FAIL		V9CX5501X1	OFF		INHB MSEQ		6.9.10-43	
036-05	CVFY GNS	GA 3	FAIL		V9CX5601X1	OFF		INHB MSEQ		6.9.10-43	
036-06	CVFY GNS	AA 1	FAIL		V90X5701X1	OFF		INHB MSEQ		6.9.10-44	
036-07	CVFY GNS	AA 2	FAIL		V9CX5801X1	OFF		INHB MSEQ		6.9.10-44	
036-08	CVFY GNS	AA 3	FAIL		V9CX5901X1	OFF		INHB MSEQ		6.9.10-44	
036-09	CVFY GNS	LH SRB	COMP	PITCH RATE 1	V95R4181C1	-0.45	+0.45	DEG/S		6.9.10-45	
036-10	CVFY GNS	LH SRB	COMP	PITCH RATE 2	V95R4182C1	-0.45	+0.45	DEG/S		6.9.10-45	
036-11	CVFY GNS	LH SRB	COMP	PITCH RATE 3	V95R4183C1	-0.45	+0.45	DEG/S		6.9.10-45	
036-12	CVFY GNS	LH SRB	COMP	YAW RATE 1	V95R4191C1	-0.45	+0.45	DEG/S		6.9.10-45	
036-13	CVFY GNS	LH SRB	COMP	YAW RATE 2	V95R4192C1	-0.45	+0.45	DEG/S		6.9.10-45	
036-14	CVFY GNS	LH SRB	COMP	YAW RATE 3	V95R4193C1	-0.45	+0.45	DEG/S		6.9.10-45	
036-15	CVFY GNS	RH SRB	COMP	PITCH RATE 1	V95R4211C1	-0.45	+0.45	DEG/S		6.9.10-45	
036-16	CVFY GNS	RH SRB	COMP	PITCH RATE 2	V95R4212C1	-0.45	+0.45	DEG/S		6.9.10-45	
036-17	CVFY GNS	RH SRB	COMP	PITCH RATE 3	V95R4213C1	-0.45	+0.45	DEG/S		6.9.10-45	
036-18	CVFY GNS	RH SRB	COMP	YAW RATE 1	V95R4221C1	-0.45	+0.45	DEG/S		6.9.10-45	
036-19	CVFY GNS	RH SRB	COMP	YAW RATE 2	V95R4222C1	-0.45	+0.45	DEG/S		6.9.10-45	
036-20	CVFY GNS	RH SRB	COMP	YAW RATE 3	V95R4223C1	-0.45	+0.45	DEG/S		6.9.10-45	
036-26	CVFY GNS	AA4	FAIL		V90X5951X1	OFF		INHB MSEQ		6.9.10-44	
036-27	CVFY GNS	GA4	FAIL		V9CX5651X1	OFF		INHB MSEQ		6.9.10-43	
246-00	VFY GNS	LH	EVENT RATE	GYRO A PITCH SMRD	B79X1844X1	ON		INHB MSEQ		2.3-6	
246-01	VFY GNS	LH	EVENT RATE	GYRO B PITCH SMRD	B79X1845X1	ON		INHB MSEQ		2.3-6	
246-02	VFY GNS	LH	EVENT RATE	GYRO C PITCH SMRD	B79X1846X1	ON		INHB MSEQ		2.3-6	
246-03	VFY GNS	LH	EVENT RATE	GYRO A YAW SMRD	B79X1847X1	ON		INHB MSEQ		2.3-6	
246-04	VFY GNS	LH	EVENT RATE	GYRO B YAW SMRD	B79X1848X1	ON		INHB MSEQ		2.3-6	
246-05	VFY GNS	LH	EVENT RATE	GYRO C YAW SMRD	B79X1849X1	ON		INHB MSEQ		2.3-6	
246-06	VFY GNS	RH	EVENT RATE	GYRO A PITCH SMRD	B79X2844X1	ON		INHB MSEQ		2.3-6	
246-07	VFY GNS	RH	EVENT RATE	GYRO B PITCH SMRD	B79X2845X1	ON		INHB MSEQ		2.3-6	
246-08	VFY GNS	RH	EVENT RATE	GYRO C PITCH SMRD	B79X2846X1	ON		INHB MSEQ		2.3-6	
246-09	VFY GNS	RH	EVENT RATE	GYRO A YAW SMRD	B75X2847X1	ON		INHB MSEQ		2.3-6	

SEQ	TIME	CD	DISC	FUNCTION	VALUE	ELSE	DURATION	INHB	MSEQ
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SEQ	TIME	CD	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	INHB	MSEQ
246-10				RH EVENT RATE GYRO B YAW SMRD	B79X2848X1 ON				1 OF 3	2.3-6
246-11				RH EVENT RATE GYRO C YAW SMRD	B79X2849X1 ON				1 OF 3	2.3-6
116-10		A		GOX VENT PURGE CNTL TEMP IND	GECT2811A					
116-11		A		GOX VENT PURGE HEATER INK TEMP I	GECT2816A					
116-13		A		GOX VENT PURGE TEMP MONITOR IND	GECT4811A					
116-14		B		A138439 NE HOOD SEAL TEMP	GSAT9311A					
116-15		B		A138439 NE HOOD SEAL TEMP	GSAT9316A					
116-16		B		A138440 SW HOOD SEAL TEMP	GSAT9301A					
116-17		B		A138440 SW HOOD SEAL TEMP	GSAT9306A					
116-18		B		A151887 HTR CHAMBER TEMP	GSAT9141A					
116-19		B		A151887 HTR CHAMBER TEMP	GSAT9146A					
202-00				CMD GOX START G002 VENT ARM RETRACT	POC4					
245-00		K		6308A103 RETRACT SWITCH NO.1	GSAX8221E ON				1 OF 3	3.1-17
245-01		K		6308A102 RETRACT SWITCH NO.2	GSAX8222E ON				1 OF 3	3.1-17
245-02		K		A133566 ARM POSITION INDICATION	GSAX8191A NOLO	2	DEG		INHB MSEQ	3.1-17
245-50		V		6308A103 RETRACT SW NO 1	GSAX8221E ON				1 OF 6	
245-51		V		6308A102 RETRACT SW NO 2	GSAX8222E ON				1 OF 6	
245-52		V		A151111 ARM POS IND	GSAX8191A NOLO	2	DEG		1 OF 6	
245-53		V		6308A103 RETRACT SW NO 1	GSAX8222E ON				1 OF 6	
245-54		V		6308A102 RETRACT SW NO 2	GSAX8227E ON				1 OF 6	
245-55		V		A151111 ARM POS IND	GSAX8196A NOLO	2	DEG		INHB MSEQ	
313-00				CMD GOX LATCH BACK CMD	GSAX8140E ON					
815-00				LABL GOX	PS04					
816-00		A		GOX VENT PURGE HTR BANK #2 ON CM	GECK1662E OFF					
816-01		A		GOX VENT PURGE HTR BANK #1 ON CM	GECK3662E OFF					
816-02		A		REG SENSE SEL I/F PRESS PRI CMD	GECK1666E OFF					
816-03		A		REG SENSE SEL I/F PRESS SEC CMD	GECK3666E OFF					
816-04		A		REG SENSE SEL SEC VLV CMD	GECK3670E OFF					
816-05		A		GOX VENT PURGE OUT PRI VLV CLS C	GECK1668E ON					
817-00		A		GOX VENT PURGE OUT PRI VLV CLS I	GECK1669E ON				GTO S8	
818-00		A		PRGE OUT SEL SEC FLOW CNTL VLV C	GECK3672E ON					
818-01		A		GOX VENT PURGE OUT SEC VLV CLS C	GECK3668E ON					
819-00		A		PRGE OUT SEL SEC FLOW CNTL VLV I	GECK3673E ON					
819-01		A		GOX VENT PURGE OUT SEC VLV CLS I	GECK3669E ON				2 OF 2	
820-00		A		GOX VENT PURGE IN PRI VLV CLS CM	GECK1664E ON				GTO S9	
820-01		A		GOX VENT PURGE IN SEC VLV CLS CM	GECK3664E ON					
822-00		A		HOOD SECONDARY MODE SELECTED	NSAK002X OFF					
822-01		A		A133524 PRI HOOD UP VLV-OPEN	GSAX8315E ON				GTO S20	
822-02		A		A133524 PRI HOOD UP VLV-OPEN	GSAX8315E ON					
823-00		A		6308A202 HOOD DOWN SWITCH NO.1	GSAX8331E OFF				1 OF 3	



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OMI S9CC5 - L

SEQ	TIME	FUNC:DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
:	CD	:	:	DESIGNATOR	SINGL	:	:	PAGE
:	CLOCK	:	:	OR	LO:HIGH	UNIT	:	:
:	:	:	:	:	:	:	:	:

837-00	A	VFY	GOX	6308A103	RETRACT SWITCH NO.1	ON		
837-01	A	VFY	GOX	6308A102	RETRACT SWITCH NO.2	ON	1 OF 3	
837-02	A	VFY	GOX	A135566	ARM POSITION INDICATION	NOLO	2	DEG
839-00	B	CMD	GOX	HTR CTL NO.2	LOAD CONNECT	OFF		INHB MSEQ
839-01	B	CMD	GOX	HTR CTL NO.2	LOAD CONNECT	OFF		
839-02	B	CMD	GOX	HTR CTL NO.1	LOAD CONNECT	OFF		
839-03	B	CMD	GOX	HTR CTL NO.1	LOAD CONNECT	OFF		
839-04	B	CMD	GOX	HTR CTL NO.2	AC ON	OFF		
839-05	B	CMD	GOX	HTR CTL NO.2	AC ON	OFF		
839-06	B	CMD	GOX	HTR CTL NO.1	AC ON	OFF		
839-07	B	CMD	GOX	HTR CTL NO.1	AC ON	OFF		
839-08	B	CMD	GOX	A135918	INLET VLV PRI CTL-OPEN	ON		
839-09	B	CMD	GOX	A135918	INLET VLV PRI CTL-OPEN	ON		
840-00	B	VFY	GOX	A135918	INLET VLV PRI CTL-OPEN	ON		
841-00	B	CMD	GOX	A135920	IN VLV CTL SEL-SEC SEL	ON		GTO S108
841-01	B	CMD	GOX	A135920	IN VLV CTL SEL-SEC SEL	ON		
841-02	B	CMD	GOX	A135916	IN VLV SEC CTL-OPEN	ON		
841-03	B	CMD	GOX	A135916	IN VLV SEC CTL-OPEN	ON		
842-00	B	VFY	GOX	A135920	IN VLV CTL SEL	ON		
842-01	B	VFY	GOX	A135916	IN VLV SEC CTL-OPEN	ON	2 OF 2	
843-00	B	CMD	GOX	A135900	PRI REG FLOW VLV-OPEN	ON		GTO S109
843-01	B	CMD	GOX	A135900	PRI REG FLOW VLV-OPEN	ON		
843-02	B	CMD	GOX	A135903	SEC REG FLOW VLV-OPEN	ON		
843-03	B	CMD	GOX	A135903	SEC REG FLOW VLV-OPEN	ON		
845-00	B	VFY	GOX	HOOD SECONDARY MODE SELECTED		OFF		GTO S120
845-01	B	CMD	GOX	A133524	PRI HOOD UP VALVE-OPEN	ON		
845-02	B	CMD	GOX	A133524	PRI HOOD UP VALVE-OPEN	ON		
846-00	B	VFY	GOX	6308A202	HOOD DOWN SWITCH NO.1	OFF		1 OF 4
846-01	B	VFY	GOX	6308A203	HOOD DOWN SWITCH NO.2	OFF		1 OF 4
846-02	B	VFY	GOX	6308A206	HOOD DOWN SWITCH NO.3	OFF		1 OF 4
846-03	B	VFY	GOX	A133716	HOOD POSITION INDICATION	NOHI	DEG	
847-00	B	VFY	GOX	6308A200	HOOD UP SWITCH NO.1	ON		GTO S120
847-01	B	VFY	GOX	6308A201	HOOD UP SWITCH NO.2	ON		2 OF 4
847-02	B	VFY	GOX	A133716	HOOD POSITION INDICATOR	NOHI	DEG	
847-03	B	VFY	GOX	6308A205	HOOD UP SWITCH NO.3	ON		2 OF 4
848-00	B	CMD	GOX	A133524	PRI HOOD UP VLV-OPEN	OFF		GTO S115
848-01	B	CMD	GOX	A133524	PRI HOOD UP VLV-OPEN	OFF		
849-00	B	CMD	GOX	A133524	PRI HOOD UP VLV-OPEN	OFF		
849-01	B	CMD	GOX	A133524	PRI HOOD VLV-OPEN	OFF		
850-00	B	CMD	GOX	A133524	PRI HOOD UP VLV-OPEN	OFF		
850-01	B	CMD	GOX	A133524	PRI HOOD UP VLV-OPEN	OFF		

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OMI S9C5 - L

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
:	CD	T	:	:	:	:	:	:	:	PAGE
:	CLOCK	E	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:

850-02	B	CMD	GOX		HOOD SECONDARY MODE SELECTED	NSAK0002X	ON			
850-03	B	CMD	GOX		A133573 SEC HOOD UP VLV-OPEN	GS AK8280E	ON			
850-04	B	CMD	GOX		A133573 SEC HOOD UP VLV-OPEN	GS AK8285E	ON			
854-00	B	VFY	GOX	\$125	6308A200 HOOD UP SWITCH NO.1	GS AX8326E	ON	2 OF 4		
854-01	B	VFY	GOX		6308A201 HOOD UP SWITCH NO.2	GS AX8327E	ON	2 OF 4		
854-02	B	VFY	GOX		A133716 HOOD POSITION INDICATOR	GS AH8536A	45	NOHI DEG		
854-03	B	VFY	GOX		6308A205 HOOD UP SWITCH NO.3	GS AX8328E	ON	2 OF 4		
855-00	B	CMD	GOX	\$126	A133573 SEC HOOD UP VLV-OPEN	GS AK8280E	OFF			
855-01	B	CMD	GOX		A133573 SEC HOOD UP VLV-OPEN	GS AK8285E	OFF			
856-00	B	CMD	GOX	\$128	A133573 SEC HOOD UP VLV-OPEN	GS AK8280E	OFF			
856-01	B	CMD	GOX		A133573 SEC HOOD UP VLV-OPEN	GS AK8285E	OFF			
857-00	B	CMD	GOX	\$130	A133680 EXTEND LOCK VALVE-CLOSE	GS AK8090E	ON			
857-01	B	CMD	GOX		A133680 EXTEND LOCK VALVE-CLOSE	GS AK8095E	ON			
857-02	B	CMD	GOX		A133501 PRI RETRACT VLV-RESE	GS AK8170E	OFF			
857-03	B	CMD	GOX		A133501 PRI RETRACT VLV-RESE	GS AK8175E	OFF			
857-04	B	CMD	GOX		A133501 PRI RETRACT VLV-RETRACT	GS AK8160E	ON			
857-05	B	CMD	GOX		A133501 PRI RETRACT VLV-RETRACT	GS AK8165E	ON			
858-00	B	VFY	GOX		A133508 PRI RETRACT VLV-RETRACT	GS AX8162E	ON			
858-01	B	VFY	GOX		A133509 PRI RETRACT VLV-RETRACT	GS AX8163E	ON	2 OF 2		
859-00	B	VFY	GOX		6308A109 ARM FULLY EXTENDED	GS AX8231E	OFF	GTO \$150		
860-00	B	VFY	GOX		6308A103 RETRACT SWITCH NO.1	GS AX8221E	ON	1 OF 3		
860-01	B	VFY	GOX		6308A103 RETRACT SWITCH NO.1	GS AX8222E	ON	1 OF 3		
860-02	B	VFY	GOX		A133566 ARM POSITION INDICATION	GS AH8191A	NOL0	2 DEG		
862-00	B	CMD	GOX	\$150	A133501 PRI RETRACT VLV-RETRACT	GS AK8160E	OFF			
862-01	B	CMD	GOX		A133501 PRI RETRACT VLV-RETRACT	GS AK8165E	OFF			
862-02	B	CMD	GOX		A133501 PRI RETRACT VLV-RESE	GS AK8170E	ON			
862-03	B	CMD	GOX		A133501 PRI RETRACT VLV-RESE	GS AK8175E	ON			
863-00	B	CMD	GOX		A133501 PRIMARY RETRACT VLV-RESE	GS AK8170E	OFF			
863-01	B	CMD	GOX		A133501 PRIMARY RETRACT VLV-RESE	GS AK8175E	OFF			
863-02	B	CMD	GOX		A133507 SECONDARY RETRACT-RETRACT	GS AK8180E	ON			
863-03	B	CMD	GOX		A133507 SECONDARY RETRACT-RETRACT	GS AK8185E	ON			
864-00	B	VFY	GOX		6308A102 RETRACT SWITCH NO.1	GS AX8221E	ON	1 OF 3		
864-01	B	VFY	GOX		6308A102 RETRACT SWITCH NO.2	GS AX8222E	ON	1 OF 3		
864-02	B	VFY	GOX		A133566 ARM POSITION INDICATION	GS AH8191A	NOL0	2 DEG		
866-00	V	CMD	GOX		HTR CNTL NO.3 - AC ON	GS AK9550E	OFF			
866-01	V	CMD	GOX		HTR CNTL NO.3 - AC ON	GS AK9555E	OFF			
866-02	V	CMD	GOX		HTR CNTL NO.3 - LOAD CONNECT	GS AK9560E	OFF			
866-03	V	CMD	GOX		HTR CNTL NO.3 - LOAD CONNECT	GS AK9565E	OFF			
866-04	V	CMD	GOX		HTR CNTL NO.2 - AC ON	GS AK9200E	OFF			
866-05	V	CMD	GOX		HTR CNTL NO.2 - AC ON	GS AK9205E	OFF			
866-06	V	CMD	GOX		HTR CNTL NO.2 - LOAD CONNECT	GS AK9210E	OFF			

SEQ	TIME	CD	FUNC	DISC	NOMENCLATURE	FUNCTION	DESIGNATOR	SINGL	OR	LO	HIGH	UNIT	ELSE	DURATION	LCC	FACE
866-07	V	CMD	GOX		HTR CNTL NO.2 - LOAD CONNECT	GSAX9215E		OFF								
866-08	V	CMD	GOX		HTR CNTL NO.1 - AC ON	GSAX9150E		OFF								
866-09	V	CMD	GOX		HTR CNTL NO.1 - AC ON	GSAX9155E		OFF								
866-10	V	CMD	GOX		HTR CNTL NO.1 - LOAD CONNECT	GSAX9160E		OFF								
866-11	V	CMD	GOX		HTR CNTL NO.1 - LOAD CONNECT	GSAX9165E		OFF								
866-12	V	CMD	GOX		A135918 INLET VLV PRI CNTL-OPEN	GSAX9050E		ON								
866-13	V	CMD	GOX		A135918 INLET VLV PRI CNTL-OPEN	GSAX9055E		ON								
867-01	V	VFY	GOX		A135918 INLET VLV PRI CNTL-OPEN	GSAX9051E		ON					1 OF 2			
867-00	S7												GTO S7			
868-01	V	CMD	GOX		A135920 IN VLV CNTL SEL-SEC SEL	GSAX9060E		ON								
868-02	V	CMD	GOX		A135920 IN VLV CNTL SEL-SEC SEL	GSAX9065E		ON								
868-03	V	CMD	GOX		A135916 IN VLV SEC CNTL-OPEN	GSAX9040E		ON								
869-00	V	VFY	GOX		A135916 IN VLV SEC CNTL-OPEN	GSAX9045E		ON					1 OF 2			
869-01	V	VFY	GOX		A135920 IN VLV CNTL SEL-SEC SEL	GSAX9066E		ON					AND			
869-02	V	VFY	GOX		A135916 IN VLV SEC CNTL-OPEN	GSAX9041E		ON					1 OF 2			
869-03	V	VFY	GOX		A135916 IN VLV SEC CNTL-OPEN	GSAX9046E		ON					GTO S9			
870-00	S9															
870-01	V	CMD	GOX		A135900 PRI REG FLOW VLV-OPEN	GSAX9025E		ON								
870-02	V	CMD	GOX		A135903 SEC REG FLOW VLV-OPEN	GSAX9030E		ON								
870-03	V	CMD	GOX		A135903 SEC REG FLOW VLV-OPEN	GSAX9035E		ON								
872-01	V	CMD	GOX		HOOD SECONDARY MODE SELECTED	NSAK0002X		OFF								
872-02	V	CMD	GOX		A133524 PRI HOOD UP VLV-OPEN	GSAX8310E		ON					GTO S20			
873-00	V	VFY	GOX		A133524 PRI HOOD UP VLV-OPEN	GSAX8315E		ON								
873-01	V	VFY	GOX		6308A202 HOOD DN SW NO. 1	GSAX8331E		OFF					1 OF 8			
873-02	V	VFY	GOX		6308A203 HOOD DN SW NO. 2	GSAX8332E		OFF					1 OF 8			
873-03	V	VFY	GOX		6308A206 HOOD DN SW NO. 3	GSAX8333E		OFF					1 OF 8			
873-04	V	VFY	GOX		A133716 HOOD POS INDICATOR	GSAX8531A	5		NOHI	DEG			1 OF 8			
873-05	V	VFY	GOX		6308A202 HOOD DN SW NO. 1	GSAX8336E		OFF					1 OF 8			
873-06	V	VFY	GOX		6308A203 HOOD DN SW NO. 2	GSAX8337E		OFF					1 OF 8			
873-07	V	VFY	GOX		6308A206 HOOD DN SW NO. 3	GSAX8338E		OFF					1 OF 8			
874-00	S15								NOHI	DEG			GTO S20			
874-01	V	VFY	GOX		6308A200 HOOD UP SW NO. 1	GSAX8321E		ON					3 OF 4			
874-02	V	VFY	GOX		6308A201 HOOD UP SW NO. 2	GSAX8322E		ON					3 OF 4			
874-03	V	VFY	GOX		6308A205 HOOD UP SW NO. 3	GSAX8323E		ON					3 OF 4			
875-00	S16								51	DEG			GTO S16			
875-01	V	VFY	GOX		6308A200 HOOD UP SW NO. 1	GSAX8326E		ON					3 OF 4			
875-02	V	VFY	GOX		6308A201 HOOD UP SW NO. 2	GSAX8327E		ON					3 OF 4			
875-03	V	VFY	GOX		6308A205 HOOD UP SW NO. 3	GSAX8328E		ON					3 OF 4			
876-00	S18								51	DEG			GTO S15			
876-01	V	CMD	GOX		A133524 PRI HOOD UP VLV-OPEN	GSAX8310E		OFF								





SEQ	TIME	I	FUNC	DISC	NONENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
:	CD	:	:	:	:	DESIGNATOR	SINGL	:	:	:	:
:	CLOCK	:	:	:	:	:	OR	LO	HIGH	:	UNIT
:	:	:	:	:	:	:	:	:	:	:	:
885-04	V	CMD	GOX	A	LOCK PRI EXTEND LOCK VLV	GSAX6000E	ON				
885-05	V	CMD	GOX	A	LOCK SEC EXTEND LOCK VLV	GSAX6020E	ON				
885-06	V	CMD	GOX	A	LOCK PRI EXTEND LOCK VLV	GSAX6005E	ON				
885-07	V	CMD	GOX	A	LOCK SEC EXTEND LOCK VLV	GSAX6025E	ON				
886-00	S33	V	CMD	GOX	A133501 PRI RETRACT VLV-RSET	GSAX8170E	OFF				
886-01	V	CMD	GOX	A133501	PRI RETRACT VLV-RSET	GSAX8175E	OFF				
886-02	V	CMD	GOX	A133501	PRI RETRACT VLV-RETRACT	GSAX8160E	ON				
886-03	V	CMD	GOX	A133501	PRI RETRACT VLV-RETRACT	GSAX8165E	ON				
887-00	V	VFY	GOX	A133508	PRI RETRACT VLV RETRACT	GSAX8167E	ON	1 OF 2			
887-02	V	VFY	GOX	A133509	PRI RETRACT VLV RETRACT	GSAX8163E	ON	AND			
887-03	V	VFY	GOX	A133509	PRI RETRACT VLV RETRACT	GSAX8168E	ON	1 OF 2			
888-00	V	VFY	GOX	6308A109	ARM FULLY EXTENDED SW 1	GSAX6071E	OFF	GTO S50			
888-01	V	VFY	GOX	6308A120	ARM FULLY EXTENDED SW 2	GSAX6081E	OFF	1 OF 4			
888-02	V	VFY	GOX	6308A109	ARM FULLY EXTENDED SW 1	GSAX6076E	OFF	1 OF 4			
888-03	V	VFY	GOX	6308A120	ARM FULLY EXTENDED SW 2	GSAX6086E	OFF	1 OF 4			
889-00	V	VFY	GOX	6308A103	RETRACT SW NO. 1	GSAX8221E	ON	GTO S5C			
889-01	V	VFY	GOX	6308A102	RETRACT SW NO. 2	GSAX8222E	ON	1 OF 6			
889-02	V	VFY	GOX	A151111	ARM POS IND	GSAX8191A	NOLO	2 DEG			
889-03	V	VFY	GOX	6308A103	RETRACT SW NO. 1	GSAX8226E	ON	1 OF 6			
889-04	V	VFY	GOX	6308A102	RETRACT SW NO. 2	GSAX8227E	ON	1 OF 6			
889-05	V	VFY	GOX	A151111	ARM POS IND	GSAX8196A	NOLO	2 DEG			
890-00	S50	V	CMD	GOX	A133501 PRI RETRACT VLV-RETRACT	GSAX8160E	OFF				
890-01	V	CMD	GOX	A133501	PRI RETRACT VLV-RETRACT	GSAX8165E	OFF				
890-02	V	CMD	GOX	A133501	PRI RETRACT VLV-RESET	GSAX8170E	ON				
890-03	V	CMD	GOX	A133501	PRI RETRACT VLV-RESET	GSAX8175E	ON				
891-00	V	CMD	GOX	A133501	PRI RETRACT VLV-RESET	GSAX8170E	OFF				
891-01	V	CMD	GOX	A133501	PRI RETRACT VLV-RESET	GSAX8175E	OFF				
891-02	V	CMD	GOX	A133507	SEC RETRACT-RETRACT	GSAX8180E	ON				
891-03	V	CMD	GOX	A133507	SEC RETRACT-RETRACT	GSAX8185E	ON				
892-00	V	VFY	GOX	6308A103	RETRACT SW NO. 1	GSAX8221E	ON	1 OF 6			
892-01	V	VFY	GOX	6208A102	RETRACT SW NO. 2	GSAX8222E	ON	1 OF 6			
892-02	V	VFY	GOX	A15111	ARM POS IND	GSAX8191A	NOLO	2 DEG			
892-03	V	VFY	GOX	6308A103	RETRACT SW NO. 1	GSAX8226E	ON	1 OF 6			
892-04	V	VFY	GOX	6308A102	RETRACT SW NO. 2	GSAX8227E	ON	1 OF 6			
892-05	V	VFY	GOX	A151111	ARM POS IND	GSAX8196A	NOLO	2 DEG			
					GTO ST12						
					GTO ST325						
015-00	CVFY	HYD	HYD	PWR	SYS 1 RVSR FLUID VOLUME	V5800102A1	40	100	PCT	LCC-3	6.7.2-2
015-01	CVFY	HYD	HYD	PWR	SYS 2 RVSR FLUID VOLUME	V5800202A1	40	100	PCT	LCC-3	6.7.2-2
015-02	CVFY	HYD	HYD	PWR	SYS 3 RVSR FLUID VOLUME	V5800302A1	40	100	PCT	LCC-3	6.7.2-2

SEQ	TIME	CD	CLOCK	DISC	FUNCTION	NOMENCLATURE	VALUE	ELSE	DURATION	LCC	PAGE
015-03	CVFY HYD	HYD	SYS1	H20	BLR	TEMP NO.1	V58T0162A1 40	DEGF	LCC-1	6.7.2-8	
015-04	CVFY HYD	HYD	SYS1	H20	BLR	TEMP NO.2	V58T0163A1 40	DEGF	LCC-1	6.7.2-8	
015-05	CVFY HYD	HYD	SYS2	H20	BLR	TEMP NO.1	V58T0262A1 40	DEGF	LCC-1	6.7.2-8	
015-06	CVFY HYD	HYD	SYS2	H20	BLR	TEMP NO.2	V58T0263A1 40	DEGF	LCC-1	6.7.2-8	
015-07	CVFY HYD	HYD	SYS3	H20	BLR	TEMP NO.1	V58T0362A1 40	DEGF	LCC-1	6.7.2-8	
015-08	CVFY HYD	HYD	SYS3	H20	BLR	TEMP NO.2	V58T0363A1 40	DEGF	LCC-1	6.7.2-8	
043-00	CVFY HYD	HYD	SYS 1	RVSR	FLUID	PRESS	V58P0131A1 43	PSIA	1 OF 2	6.7.2-10	
043-01	CVFY HYD	HYD	SYS 1	GN2	ACCUM	PRESS	V58P0167A1 1906	PSIA	INHB MAPU	6.7.2-10	
043-02	CVFY HYD	HYD	SYS 2	RVSR	FLUID	PRESS	V58P0231A1 43	PSIA	1 OF 2	6.7.2-10	
043-03	CVFY HYD	HYD	SYS 2	GN2	ACCUM	PRESS	V58P0267A1 1906	PSIA	INHB MAPU	6.7.2-10	
043-04	CVFY HYD	HYD	SYS 3	RVSR	FLUID	PRESS	V58P0331A1 43	PSIA	1 OF 2	6.7.2-10	
043-05	CVFY HYD	HYD	SYS 3	GN2	ACCUM	PRESS	V58P0367A1 1906	PSIA	INHB MAPU	6.7.2-10	
043-06	CVFY HYD	HYD	SYS 1	CIRC	PUMP	PRESS	V58P0137A1 330	NOHI	INHB MAPU	6.7.2-5	
043-07	CVFY HYD	HYD	SYS 2	CIRC	PUMP	PRESS	V58P0237A1 330	NOHI	INHB MAPU	6.7.2-5	
043-08	CVFY HYD	HYD	SYS 3	CIRC	PUMP	PRESS	V58P0337A1 330	NOHI	INHB MAPU	6.7.2-5	
107-00	ICL HYD	6416	PUMP	NO 1	PRESSURE		GHPY1185A				
107-01	ICL HYD	6416	PUMP	NO 2	PRESSURE		GHPY1187A				
107-02	ICL HYD	6421	PUMP	NO 1	PRESSURE		GHPY1785A				
107-03	ICL HYD	6421	PUMP	NO 2	PRESSURE		GHPY1787A				
107-04	ICL HYD	6417	PUMP	NO 1	PRESSURE		GHPY1485A				
107-05	ICL HYD	6417	PUMP	NO 2	PRESSURE		GHPY1487A				
107-06	ICL HYD	MAIN	BUS	A	VOLTAGE - MLP		D76V01001				
107-07	ICL HYD	MAIN	BUS	B	VOLTAGE - MLP		D76V02001				
107-08	ICL HYD	MAIN	BUS	C	VOLTAGE - MLP		D76V03001				
138-00	VFY HYD	HYD	SYS 1	H20	BOILER	OK	V58X0182E1 0N	INHB MAPU		6.7.2-9	
138-01	VFY HYD	HYD	SYS 2	H20	BOILER	OK	V58X0282E1 0N	INHB MAPU		6.7.2-9	
138-02	VFY HYD	HYD	SYS 3	H20	BOILER	OK	V58X0382E1 0N	INHB MAPU		6.7.2-9	
138-03	VFY HYD	HYD	SYS 1	MN	PUMP	DEPRESS ENBL A	V58S0172E1 0N	INHB MAPU			
138-04	VFY HYD	HYD	SYS 2	MN	PUMP	DEPRESS ENBL A	V58S0272E1 0N	INHB MAPU			
138-05	VFY HYD	HYD	SYS 3	MN	PUMP	DEPRESS ENBL A	V58S0372E1 0N	INHB MAPU			
138-06	VFY HYD	HYD	SYS 1	MN	PUMP	DEPRESS ENBL B	V58S0173E1 0N	INHB MAPU			
138-07	VFY HYD	HYD	SYS 2	MN	PUMP	DEPRESS ENBL B	V58S0273E1 0N	INHB MAPU			
138-08	VFY HYD	HYD	SYS 3	MN	PUMP	DEPRESS ENBL B	V58S0373E1 0N	INHB MAPU			
159-00	VFY HYD	HYD	SYS 1	SUPPLY	PRESS B		V58P0115A1 2850	PSIA	INHB MPS4	6.7.2-3	
159-01	VFY HYD	HYD	SYS 1	SUPPLY	PRESS C		V58P0116C1 2800	PSIA	INHB MPS4	6.7.2-3	
159-02	VFY HYD	HYD	SYS 2	SUPPLY	PRESS B		V58P0215A1 2850	PSIA	INHB MPS4	6.7.2-3	
159-03	VFY HYD	HYD	SYS 2	SUPPLY	PRESS C		V58P0216C1 2800	PSIA	INHB MPS4	6.7.2-3	
159-04	VFY HYD	HYD	SYS 3	SUPPLY	PRESS B		V58P0315A1 2850	PSIA	INHB MPS4	6.7.2-3	
159-05	VFY HYD	HYD	SYS 3	SUPPLY	PRESS C		V58P0316C1 2800	PSIA	INHB MPS4	6.7.2-3	
161-00	CVFY HYD	HYD	SYS 1	CIRC	PUMP	PRESS	V58P0137A1 N0L0	PSIA	INHB MSEQ	6.7.2-5	
161-01	CVFY HYD	HYD	SYS 2	CIRC	PUMP	PRESS	V58P0237A1 N0L0	PSIA	INHB MSEQ	6.7.2-5	

DATE 12-10-85

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI 59005 - L

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: SEQ : I : S : TIME : I : S : FUNC:DISC : NOMENCLATURE : FUNCTION : VALUE : DESIGNATOR:SINGL : ELSE : DURATION : LCC : FACE :
: CD : T : : : : : : : : : : : : : : : : :
: CLOCK : E : : : : : : : : : : : : : : : : :
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SEQ	I	S	TIME	I	S	FUNC:DISC	NOMENCLATURE	FUNCTION	VALUE	DESIGNATOR:SINGL	ELSE	DURATION	LCC	FACE
161-02							HYD SYS 3 CIRC PUMP PRESS		140	PSIA	INHB MSEQ		6.7.2-5	
169-00							HYD SYS 1 RVSR FLUID PRESS		NOHI	PSIA	1 OF 2		6.7.2-10	
169-01							SYS 1 GN2 ACCUM PRESS		NOHI	PSIA	INHB MSEQ		6.7.2-10	
169-02							HYD SYS 2 RVSR FLUID PRESS		NOHI	PSIA	1 OF 2		6.7.2-10	
169-03							SYS 2 GN2 ACCUM PRESS		NOHI	PSIA	INHB MSEQ		6.7.2-10	
169-04							HYD SYS 3 RVSR FLUID PRESS		NOHI	PSIA	1 OF 2		6.7.2-10	
169-05							SYS 3 GN2 ACCUM PRESS		NOHI	PSIA	INHB MSEQ		6.7.2-10	
188-00							HYD SYS 1 SUPPLY PRESS B		3400	PSIA	INHB MSEQ		6.7.2-3	
188-01							HYD SYS 2 SUPPLY PRESS C		3400	PSIA	INHB MSEQ		6.7.2-3	
188-02							HYD SYS 2 SUPPLY PRESS B		3400	PSIA	INHB MSEQ		6.7.2-3	
188-03							HYD SYS 2 SUPPLY PRESS C		3400	PSIA	INHB MSEQ		6.7.2-3	
188-04							HYD SYS 3 SUPPLY PRESS B		3400	PSIA	INHB MSEQ		6.7.2-3	
188-05							HYD SYS 3 SUPPLY PRESS C		3400	PSIA	INHB MSEQ		6.7.2-3	
110-00							OMS-L POD HE TANK PRESS 2		3400	PSIA	INHB MSEQ		6.7.2-3	
110-02							OMS-L POD HE TANK PRESS 1		3400	PSIA	INHB MSEQ		6.7.2-3	
110-04							OMS-R POD HE TANK PRESS 2		3400	PSIA	INHB MSEQ		6.7.2-3	
110-06							OMS-R POD HE TANK PRESS 1		3400	PSIA	INHB MSEQ		6.7.2-3	
110-10							RCS L AFT HE FU TANK PRESS-2		3400	PSIA	INHB MSEQ		6.7.2-3	
110-11							RCS L AFT HE FU TANK PRESS-1		3400	PSIA	INHB MSEQ		6.7.2-3	
110-12							RCS R AFT HE FU TANK PRESS-2		3400	PSIA	INHB MSEQ		6.7.2-3	
110-13							RCS R AFT HE FU TANK PRESS-1		3400	PSIA	INHB MSEQ		6.7.2-3	
110-14							RCS FWD HE FU TANK PRESS-2		3400	PSIA	INHB MSEQ		6.7.2-3	
110-15							RCS FWD HE FU TANK PRESS-1		3400	PSIA	INHB MSEQ		6.7.2-3	
110-17							RCS L AFT HE FU TANK TEM-1		3400	PSIA	INHB MSEQ		6.7.2-3	
110-18							OMS-L POD HE TANK TEM-UPPER		3400	PSIA	INHB MSEQ		6.7.2-3	
110-20							RCS R AFT HE FU TANK TEMP-1		3400	PSIA	INHB MSEQ		6.7.2-3	
110-21							RCS FWD HE FU TANK TEMP-UPPER		3400	PSIA	INHB MSEQ		6.7.2-3	
110-23							RCS FWD HE FU TANK TEMP-1		3400	PSIA	INHB MSEQ		6.7.2-3	
110-28							RCS FWD FU TANK ULLAGE PRESS		3400	PSIA	INHB MSEQ		6.7.2-3	
110-30							RCS L AFT FU TANK ULLAGE PRESS		3400	PSIA	INHB MSEQ		6.7.2-3	
110-32							RCS R AFT FU TANK ULLAGE PRESS		3400	PSIA	INHB MSEQ		6.7.2-3	
110-34							A80497 FR FU PT743 PR		3400	PSIA	INHB MSEQ		6.7.2-3	
110-35							A80503 FR FU PT743 PR		3400	PSIA	INHB MSEQ		6.7.2-3	
110-36							A100531 PRT LHRO FU PT743 PR		3400	PSIA	INHB MSEQ		6.7.2-3	
110-37							A12269 RHR FU PT743 PR		3400	PSIA	INHB MSEQ		6.7.2-3	
110-41							A100523 PRT LHO FU PT743 PR		3400	PSIA	INHB MSEQ		6.7.2-3	
110-42							A100533 PRT LHO FU PT743 PR		3400	PSIA	INHB MSEQ		6.7.2-3	
110-43							A11727 LHR FU PT743 PR		3400	PSIA	INHB MSEQ		6.7.2-3	
110-44							A100573 PRT RHR FU PT743 PR		3400	PSIA	INHB MSEQ		6.7.2-3	
110-45							A101097 PRT RHO FU PT743 PR		3400	PSIA	INHB MSEQ		6.7.2-3	
110-50							A100571 PRT RHO FU PT743 PR		3400	PSIA	INHB MSEQ		6.7.2-3	

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	DURATION	LCC
:	CD	:	:	:	:	DESIGNATOR	:	ELSE	PAGE
:	CLOCK	:	:	:	:	LO	HIGH	UNIT	:
110-69	V	ICL	HYFU	FRC5	PROP TK PRESS	V42P1310C1			
110-70	V	ICL	HYFU	LARC	PROP TK PRESS	V42P2310C1			
110-71	V	ICL	HYFU	RARC	PROP TK PRESS	V42P3310C1			
110-72	V	ICL	HYFU	LOMS	PROP TK PRESS	V43P4321C1			
110-73	V	ICL	HYFU	ROMS	PROP TK PRESS	V43P5321C1			
110-01		ICL	HYOX	RCS	L AFT HE OX TANK PRESS-2	V42P2112C1			
110-03		ICL	HYOX	RCS	L AFT HE OX TANK PRESS-1	V42P2110C1			
110-05		ICL	HYOX	RCS	R AFT HE OX TANK PRESS-2	V42P3112C1			
110-07		ICL	HYOX	RCS	R AFT HE OX TANK PRESS-1	V42P3110C1			
110-08		ICL	HYOX	RCS	FWD HE OX TANK PRESS-2	V42P1112C1			
110-09		ICL	HYOX	RCS	FWD HE OX TANK PRESS-1	V42P1110C1			
110-16		ICL	HYOX	RCS	L AFT HE OX TANK TEM-1	V42T2100C1			
110-19		ICL	HYOX	RCS	R AFT HE OX TANK TEM-1	V42T3100C1			
110-22		ICL	HYOX	RCS	FWD HE OX TANK TEM-1	V42T1100C1			
110-29	K	ICL	HYOX	RCS	FWD OX TANK ULLAGE PRESS	V42P1115C1			
110-31	K	ICL	HYOX	RCS	L AFT OX TANK ULLAGE PRESS	V42P2115C1			
110-33	K	ICL	HYOX	RCS	R AFT OX TANK ULLAGE PRESS	V42P3115C1			
110-38	K	ICL	HYOX	A80498	FR OX PT742 PR	GN0P3029A			
110-39	K	ICL	HYOX	A80504	FR OX PT742 PR	GN0P3025A			
110-40	K	ICL	HYOX	A100532	PRT RHO OX PT742 PR	GN0P3113A			
110-46	K	ICL	HYOX	A100524	PRT RHO OX PT742 PR	GNCP3115A			
110-47	K	ICL	HYOX	A100534	PRT RHO OX PT742 PR	GN0P3124A			
110-48	K	ICL	HYOX	A111728	RHR OX PT742 PR	GN0P3103A			
110-49	K	ICL	HYOX	A112270	LHR OX PT742 PR	GN0P3237A			
110-51	K	ICL	HYOX	A100574	PRT LHO OX PT742 PR	GN0P3218A			
110-52	K	ICL	HYOX	A101098	PRT LHO OX PT742 PR	GN0P3211A			
110-53	K	ICL	HYOX	A100572	PRT LHO OX PT742 PR	GN0P32C7A			
110-60	V	ICL	HYOX	FRC5	PROP TK PRESS	V42P1210C1			
110-61	V	ICL	HYOX	LARC	PROP TK PRESS	V42P2210C1			
110-62	V	ICL	HYOX	RARC	PROP TK PRESS	V42P3210C1			
110-63	V	ICL	HYOX	LOMS	PROP TK PRESS	V43P4221C1			
110-64	V	ICL	HYOX	ROMS	PROP TK PRESS	V43P5221C1			
110-65	V	ICL	HYOX	RGN	GN2 TANK PRESS	V43P5547C1			
110-66	V	ICL	HYOX	RGN	GN2 TANK PRESS	V43P5548C1			
110-67	V	ICL	HYOX	LGN	GN2 TANK PRESS	V43P4547C1			
110-68	V	ICL	HYOX	LGN	GN2 TANK PRESS	V43P4548C1			
012-00		CVFY	INST	PCMNU	BSR PWR GOOD				
012-01		CVFY	INST	PCMNU	BSR MTU GOOD	V75X2121D1 ON		LCC-3	6.9.6-2
012-02		CVFY	INST	PCMNU	BSR PROM PAR GOOD	V75X2122D1 ON		LCC-3	6.9.6-2
012-03		CVFY	INST	PCMNU	BSR 128 KBS DNK GOOD	V75X2123D1 ON		LCC-3	6.9.6-2
012-04		CVFY	INST	PCMNU	BSR 64 KBS DNK GOOD	V75X2124D1 ON		LCC-3	6.9.6-2
012-04		CVFY	INST	PCMNU	BSR 64 KBS DNK GOOD	V75X2125D1 ON		LCC-3	6.9.6-2





SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
:	:	CD	:	:	:	DESIGNATOR	:	:	:	PAGE
:	CLOCK	:	:	:	:	OR LO	HIGH	UNIT	:	:
:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:
012-05			CVFY	INST	PCMMU BSR 128 KBS TLM PAR GOOD	V75X2126D1	ON	LCC-3		6.9.6-2
012-06			CVFY	INST	PCMMU BSR 128 KBPS COUNTERS GOOD	V75X2127D1	ON	LCC-3		6.9.6-2
012-07			CVFY	INST	PCMMU BSR 64 KBS COUNTERS GOOD	V75X2128D1	ON	LCC-3		6.9.6-2
012-08			CVFY	INST	PCMMU BSR INPUT DATA VALID	V75X2130D1	ON	LCC-3		6.9.6-2
012-09			CVFY	INST	OI RAM PARITY GOOD	V75X2131D1	ON	LCC-3		6.9.6-2
012-10			CVFY	INST	PCMMU BSR PDI RAM GOOD	V75X2132D1	ON	LCC-3		6.9.6-2
012-11			CVFY	INST	PCMMU BSR TOGGLE BUFFER GOOD	V75X2133D1	ON	LCC-3		6.9.6-2
012-12			CVFY	INST	PCMMU BSR NO RESPONSE GPC	V75X2134D1	ON	LCC-3		6.9.6-2
144-00			VFY	INST	RCDR OPS1 BITE	V75X2529E1	ON	3 OF 3		6.9.6-5
144-01			VFY	INST	RCDR OPS1 HEADTEMP	V75T2517A1	NULO	120 DEGF		6.9.6-5
144-02			VFY	INST	RCDR OPS 1 TAPE MOTION	V75X2523E1	ON	OR		6.9.6-5
144-03			VFY	INST	RCDR OPS2 BITE	V75X2629E1	ON	3 OF 3		6.9.6-5
144-04			VFY	INST	RCDR OPS2 HEADTEMP	V75T2617A1	NULO	120 DEGF		6.9.6-5
144-05			VFY	INST	RCDR OPS 2 TAPE MOTION	V75X2623E1	ON	INHB MAPU		6.9.6-5
021-00			VFY	INTG	OPERATIONS CONSOLE #12 GO MODE	SC12G0	ON	GTO ST010		
			COM	INTG	START ONE-SHOT DATA TRANSFER	N020INIGR	DPS			
ST010			VFY	INTG	INTEGRATION CONSOLE GO MODE	SINTG60	ON	GTO ST020		
			COM	INTG	START ONE-SHOT DATA TRANSFER	N020INIGR	INTG			
ST020			VFY	INTG	MASTER CONSOLE GO MODE	SMSTRG0	ON	GTO ST030		
			COM	INTG	START ONE-SHOT DATA TRANSFER	N020INIGR	SW			
ST030			VFY	INTG	BACKUP TYPE II CONSOLE GO MODE	SBKUPG0	ON	GTO ST040		
			COM	INTG	START ONE-SHOT DATA TRANSFER	N020INIGR	BKUP			
ST040			LABL	INTG						
022-00	-21:00		VFY	INTG	ONE-SHOT DATA ACKNOWLEDGE	N03IS016E	OFF	WAIT		
			MMSG	INTG	ONE SHOT DATA XFER COMPLETE					
			MSG	INTG	GO FOR OPS 101 TRANSITION					
023-01			CMD	INTG	COUNTDOWN CLOCK HOLD					
			CMD	INTG	SET 10 MIN HOLD TIMER		10			
			VFY	INTG	HOLD TIMER EXPIRED				MIN/SEC	WAIT
023-02			VFY	INTG	ONE-SHOT DATA ACKNOWLEDGE	N03IS016E	OFF	WAIT		
024-00	-20:00		CVFY	INTG	INTEGRATION CONSOLE GO MODE	SINTGGO	ON	HOLD AT T-9 MIN		
024-01			CMD	INTG	COUNTDOWN CLOCK COUNT					



SEQ	TIME	CD	FUNC	DISC	NOMENCLATURE	VALUE	FUNCTION	ELSE	DURATION	LCC
:	CD	:	:	:	:	:	:	:	:	:
:	CLOCK	:	:	:	:	:	:	:	:	PAGE
:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:
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026-00					GPC DUMP COMP ACKNOWLEDGE		N03IS018E	OFF		PL
					OPERATIONS CONSOLE #12 GO MODE		SC12GO	ON	GTO ST060	
					START OPS TRANSITION		N022INTGR	DPS		PL
ST060					INTEGRATION CONSOLE GO MODE		SINTGGO	ON	GTO STC70	
					START OPS TRANSITION		N022INTGR	INTG		PL
ST070					MASTER CONSOLE GO MODE		SMSTRGO	ON	GTO ST080	
					START OPS TRANSITION		N022INTGR	SW		PL
ST080					BACKUP TYPE II CONSOLE GO MODE		SBKUPGO	ON	GTO STC90	
					START OPS TRANSITION		N022INTGR	BKUP		PL
ST090										
					MSG INTG OPS 101 TRANSITION STARTEDATA XFER STARTED					
					GO FOR GPC DUMP AND COMPARE					
028-00					OPS 101 TRANSITION ACKNOWLEDGE		N03IS017E	OFF		PL
028-01					IMU HOLD AVAILABLE TIMER ACTIV.		GCDKTM1E	ON	INHBM009	
029-00					CURRENT LDB GPC MEMORY CONFIG		NGPCLMCNFG 1			
029-02					JTOY OF LIFTOFF		CMD-LS		GTO ST100	
029-03					RSL RESUME COUNT		CMD-LS	ON		
030-00					OPERATIONS CONSOLE #12 GO MODE		SC12GO	ON	GTO ST110	
					START GPC DUMP AND COMPARE		N024INTGR	DPS		PL
ST110					INTEGRATION CONSOLE GO MODE		SINTGGO	ON	GTO ST120	
					START GPC DUMP AND COMPARE		N024INTGR	INTG		PL
ST120					MASTER CONSOLE GO MODE		SMSTRGO	ON	GTO ST130	
					START GPC DUMP AND COMPARE		N024INTGR	SW		PL
ST130					BACKUP TYPE II CONSOLE GO MODE		SBKUPGO	ON	GTO ST140	
					START GPC DUMP AND COMPARE		N024INTGR	BKUP		PL
ST140					GPC DUMP COMP ACKNOWLEDGE		N03IS018E	ON		PL
					MSG INTG GPC DUMP AND COMPARE STARTED					
					GO FOR T-9 GLS SEQUENCE					
031-00					BACKUP TYPE II CONSOLE GO MODE		SBKUPGO	ON	GTO ST150	
					PERFORM MIP 1		MIP1	ON		
					PERFORM MIP 2		MIP2	ON		
ST150					INTEGRATION CONSOLE GO MODE		SINTGGO	ON	GTO ST160	
					PERFORM MIP 1		MIP1			
					PERFORM MIP 2		MIP2			
ST160					MASTER CONSOLE GO MODE		SMSTRGO	ON	GTO ST170	
					PERFORM MIP 1		MIP1			
					PERFORM MIP 2		MIP2			
045-00					COUNTDOWN HOLD FLAG		V90X8667X1	OFF	INHBM009	
046-00					OPERATIONS CONSOLE #3 GO MODE		SC3GO	ON	INHBM009	4-8
046-01					OPERATIONS CONSOLE #4 GO MODE		SC4GO	ON	INHBM009	4-9
046-02					OPERATIONS CONSOLE #12 GO MODE		SC12GO	ON	INHBM009	4-7





DATE 12-10-85

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD SIS 33

OMJ S9C5 - L

SEQ	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
:	:	:	:	:	DESIGNATOR	:	:	:	PAGE
:	:	CLOCK	:	:	LO	HIGH	:	:	:
:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:
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217-01	VFY	INTG	RSS	MANUAL HOLD		ON				INHB	MLH2
217-02	VFY	INTG	NTD	MANUAL HOLD		ON				INHB	MLH2
217-03	VFY	INTG	GLS	MANUAL HOLD		ON				INHB	MLH2
217-04	VFY	INTG	GLS-GO	FOR LH2 REPLENISH TERMINA	MLH2	ON					
217-05	MMSG	INTG	GO	FOR RS AUTO SEQ START		ON					
217-06	MSG	INTG	ET	LH2 PRESS'G START		ON					
229-00	CMD	INTG	EX	DO BITE TEST 4 VIA PROM SEQ	LL1	OFF				INHB	MSEQ
229-01	VFY	INTG	DO	0 CHAN 0	LL1	OFF				INHB	MSEQ
229-02	VFY	INTG	DO	4 CHAN 0	LL1	OFF				INHB	MSEQ
229-03	CMD	INTG	READ	LL1 BITE STATUS REGISTER	LL1						
229-04	VFY	INTG	BITE	STATUS REGISTER	INTNAME	X0000				INHB	MSEQ
229-05	CMD	INTG	EX	DO BITE TEST 4 VIA PROM SEQ	LR1	OFF				INHB	MSEQ
229-06	VFY	INTG	DO	0 CHAN 0	LR1	OFF				INHB	MSEQ
229-07	VFY	INTG	DO	4 CHAN 0	LR1	OFF				INHB	MSEQ
229-08	CMD	INTG	READ	LR1 BITE STATUS REGISTER	LR1					INHB	MSEQ
229-09	VFY	INTG	BITE	STATUS REGISTER	INTNAME	X0000				INHB	MSEQ
234-00	CMD	INTG	EX	DO BITE TEST 4 VIA PROM SEQ	LL2	OFF				INHB	MSEQ
234-01	VFY	INTG	DO	0 CHAN 0	LL2	OFF				INHB	MSEQ
234-02	VFY	INTG	DO	4 CHAN 0	LL2	OFF				INHB	MSEQ
234-03	CMD	INTG	READ	LL2 BITE STATUS REGISTER	LL2					INHB	MSEQ
234-04	VFY	INTG	BITE	STATUS REGISTER	INTNAME	X0000				INHB	MSEQ
234-05	CMD	INTG	EX	DO BITE TEST 4 VIA PROM SEQ	LR2	OFF				INHB	MSEQ
234-06	VFY	INTG	DO	0 CHAN 0	LR2	OFF				INHB	MSEQ
234-07	VFY	INTG	DO	4 CHAN 0	LR2	OFF				INHB	MSEQ
234-08	CMD	INTG	READ	LR2 BITE STATUS REGISTER	LR2					INHB	MSEQ
234-09	VFY	INTG	BITE	STATUS REGISTER	INTNAME	X0000				INHB	MSEQ
244-00	CMD	INTG	LOCK	SRB MDM LL1/LR1 CRITICAL	LL1/LR1	ON				INHB	MSEQ
244-01	VFY	INTG	SRB	MDM LOCKED	LL1/LR1	X0000				INHB	MSEQ
252-00	LABL	INTG	LAST	HOLD MILESTONE	MSEQ						
252-01	VFY	INTG	GLS-GO	FOR SRB IGNITION	MENG	ON				INHB	MSEQ
252-02	VFY	INTG	RSS	MANUAL HOLD	MSRB	ON				INHB	MSEQ
252-03	VFY	INTG	NTD	MANUAL HOLD		ON				INHB	MSEQ
252-04	VFY	INTG	GLS	MANUAL HOLD		ON				INHB	MSEQ
252-05	VFY	INTG	GLS-GO	FOR RS AUTO SEQ START		ON				INHB	MSEQ
252-06	VFY	INTG	LPS	- GO FOR RS AUTO SEQ START	MSEQ	ON					
252-07	CMD	INTG	GO	FOR SSME START	CMD-LS	ON					
252-10	MMSG	INTG	GO	FOR SSME START		ON					
252-11	MSG	INTG	HPU	START							
252-12	CMD	INTG	SPARE	CDT TIMER ACTIVATION	GCDKTIM4E	ON					
265-00	CVFY	INTG	LAUNCH	SEQUENCE ABORT FLAG	V90X8382X1	OFF					
272-00	MSG	INTG	SOUND	SUPPRESSION WATER ON	EXIT					CPER	G001



SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PL
:	CD	T	:	:	:	DESIGNATOR	SINGL	OR	LO	HIGH	UNIT
:	CLOCK	E	:	:	:	:	:	:	:	:	:
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321-28	COM	INTG			SYSTEMS IN CONTROL						
321-29	COM	INTG			SYSTEMS IN CONTROL	N012INTGR	TINST				
321-30	COM	INTG			SYSTEMS IN CONTROL	N012INTGR	BINST				
321-31	COM	INTG			SYSTEMS IN CONTROL	N012INTGR	GMC				
323-00	CMD	INTG			IMU HOLD AVAILABLE	GCDKTIME	OFF				
323-01	CMD	INTG			APU HOLD AVAILABLE	GCDKTIME	OFF				
323-02	CMD	INTG			LOX HOLD AVAILABLE	GCDKTIME	OFF				
323-03	CMD	INTG			SPARE CDI TIMER ACTIVATION	GCDKTIME	OFF				
500-00	CMD	INTG			LAUNCH SEQUENCE HOLD	CMD-LS	ON				
500-01	CMD	INTG			RECYCLE	CMD-LS	ON				
501-00	CMD	INTG			GLS BREAKOUT	N011INTGR	ON				
501-01	CMD	INTG			SYSTEMS IN CONTROL	N012INTGR	ON				
502-00	VFY	INTG		ST300	GO FOR MAIN ENG START	V9C4838DC1	-530	NOHI	SEC		
502-01	VFY	INTG			COUNTDOWN TIME	V90X8382X1	OFF				
502-02	VFY	INTG			LAUNCH SEQUENCE ABORT FLAG	CMD-LS	ON				
502-03	CMD	INTG			LAUNCH SEQUENCE HOLD	CMD-LS	ON				
502-04	CMD	INTG			RECYCLE	CMD-LS	ON				
505-00	CMD	INTG			UNLOCK SRB MDM FOR	B75K3065XL	ON				
505-01	CMD	INTG			UNLOCK SRB MDM FOR	B75K3066XL	ON				
505-02	CMD	INTG			UNLOCK SRB MDM FOR	B75K4066XL	ON				
505-03	CMD	INTG			UNLOCK SRB MDM FOR	B75K4068XL	ON				
513-01	CMD	INTG			GCUT SELECT						
513-02	CMD	INTG									
514-01	CMD	INTG			GC02 SELECT						
518-00	CMD	INTG			UNLOCK SRB MDM FOR	B75K3067XL	ON				
518-01	CMD	INTG			UNLOCK SRB MDM FOR	B75K3068XL	ON				
518-02	CMD	INTG			UNLOCK SRB MDM FOR	B75K4067XL	ON				
518-03	CMD	INTG			UNLOCK SRB MDM FOR	B75K4068XL	ON				
523-00	CMD	INTG			VENT DOOR SAFING ENABLED	S013	ON				
526-00	VFY	INTG			LAUNCH SEQUENCE ABORT FLAG	V90X8382X1	OFF				
551-00	VFY	INTG			LAUNCH SEQUENCE ABORT FLAG	V90X8382X1	ON				
552-06	CMD	INTG			ENABLE ME-1 SAFING		1				
553-06	CMD	INTG			ENABLE ME-2 SAFING		1				
554-06	CMD	INTG			ENABLE ME-3 SAFING		1				
555-00	VFY	INTG			ENABLE ME-1 SAFING		1				
555-02	CMD	INTG			ENABLE ME-1 SAFING		2				
555-04	CMD	INTG			ENABLE ME-1 SAFING		3				
556-00	VFY	INTG			ENABLE ME-2 SAFING		1				
556-02	CMD	INTG			ENABLE ME-2 SAFING		2				
556-04	CMD	INTG			ENABLE ME-2 SAFING		3				
557-00	VFY	INTG			ENABLE ME-3 SAFING		1				

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SEQ	TIME	CD	I	FUNG	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
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557-02			CMD	INTG	ENABLE	ME-3 SAFING		2				
557-04			CMD	INTG	ENABLE	ME-3 SAFING		3				
557-05	ST365		VFY	INTG	ENABLE	ME-1 SAFING		2 / 3		GTO ST359		
557-06			VFY	INTG	ENABLE	ME-2 SAFING		2 / 3		GTO ST359		
557-07			VFY	INTG	ENABLE	ME-3 SAFING		2 / 3		GTO ST359		
562-15			OMSG	INTG	ENG 2	SAFING ENABLED						
567-04			OMSG	INTG	L02	OVBU FAILED TO OPEN						
567-05			OMSG	INTG	L02	ACCUMULATOR RECIRC VLVLS CMD						
568-00	ST379		LABL	INTG			S013					
569-00	ST370		VFY	INTG	LAUNCH	SEQUENCE ABORT FLAG	V9CX8382X1	OFF		GTO ST380		
571-00	ST380		OMSG	INTG	***	GLS GO FOR APU SHUTDOWN ***						
571-01	ST390		LABL	INTG								
571-07			VFY	INTG	LAUNCH	SEQUENCE ABORT FLAG	V9DX8382X1	ON		GTO ST395		
571-10	ST395		VFY	INTG	T-35	FLG SET - START VENT DOOR OPS		ON		GTO ST420		
588-00	ST420		LABL	INTG			S014					
616-00			VFY	INTG	LAUNCH	SEQUENCE ABORT FLAG	V9CX8382X1	ON		GTO ST465		
624-00	ST470	K	CMD	INTG	\$	DELAY 1 SEC \$						
633-00	ST490	V	CMD	INTG	\$	DELAY 1 SEC \$						
634-00			CMD	INTG	GLS	SAFING COMPLETE						
650-00	ST500		VFY	INTG	CURRENT	LDB GPC MEMORY CONFIG	NO13INTGR	ON		GTO ST500		
701-00			LABL	INTG			NGPCLMCNFG	9				
701-46	ST30		VFY	INTG	LPS	GO FOR AUTO SEQ START HOLD	G0C1					
701-47			VFY	INTG	R/S	SEQ SSME GO FOR LAUNCH HOLD	V9CX8393X1	OFF		DISPLAY		PL
701-48			VFY	INTG	LPS	GO FOR ENGINE START HOLD	V9CX8395X1	OFF		DISPLAY		
701-49			VFY	INTG	LPS	COUNTDOWN HOLD	V9CX8394X1	OFF		DISPLAY		PL
701-50			VFY	INTG	VENT	DOOR POS HOLD	V90X8768X1	OFF		DISPLAY		
701-51			VFY	INTG	ORBITER	VENT DOORS STATUS WORD	V90X8770X1	ON		GTO ST35		
701-52			VFY	INTG	LPS	ORBITER VENT DOORS OVRD WORD	V90J8201C1	INTAME1	STORE			
701-53			VFY	INTG	COMPUTE	NAME1 OR NAME2	V95J8836C1	INTAME2	STORE			
701-54	ST35		VFY	INTG	LAUNCH	SEQUENCE ABORT	INTNAME	XFFFF	XFFF0	DISPLAY		
702-00			LABL	INTG			V90X8382X1	ON		GTO ST40		
702-04			OMSG	INTG	E-1	LH2 INLET OVERPRESS -	G002					
703-00			LABL	INTG			G003					
703-04			OMSG	INTG	E-2	LH2 INLET OVERPRESS -	G003					
704-00			LABL	INTG			G0C4					
704-04			OMSG	INTG	E-3	LH2 INLET OVERPRESS -	G004					
705-00			LABL	INTG			G005					
706-00			LABL	INTG			G006					
706-06	ST10		VFY	INTG	\$	MAINLINE HAS NOT PROGRESSED PAST MSEQ \$				GTO ST11		
706-10	ST11		VFY	INTG	\$	MAINLINE HAS NOT PROGRESSED PAST MENG \$				GTO ST12		
707-00			LABL	INTG			G007					

: SEQ : TIME : I : FUNC:DISC : : NOMENCLATURE : : FUNCTION : : ELSE : : DURATION : : LCC : : S :  
 : : CD : T : : : : : : DESIGNATOR: SINGL : : : : : : PAEE : : : S :  
 : : CLOCK : E : : : : : : : OR LO:HIGH : UNIT : : : : : : : F : : : F :  
 : D : : : D :

SEQ	TIME	I	FUNC:DISC	NOMENCLATURE	FUNCTION	ELSE	DURATION	LCC	S
707-06	ST10	VFY	INTG	\$ MAINLINE HAS NOT PROGRESSED	PAST MSEQ \$				
707-10	ST11	VFY	INTG	\$ MAINLINE HAS NOT PROGRESSED	PAST MENG \$				
708-00		LABL	INTG		GO08				
708-06	ST10	VFY	INTG	\$ MAINLINE HAS NOT PROGRESSED	PAST MSEQ \$				
708-10	ST11	VFY	INTG	\$ MAINLINE HAS NOT PROGRESSED	PAST MENG \$				
709-00		LABL	INTG		GO09				
709-06	ST10	VFY	INTG	\$ MAINLINE HAS NOT PROGRESSED	PAST MSEQ \$				
709-10	ST11	VFY	INTG	\$ MAINLINE HAS NOT PROGRESSED	PAST MENG \$				
710-00		LABL	INTG		GO10				
710-06	ST10	VFY	INTG	\$ MAINLINE HAS NOT PROGRESSED	PAST MSEQ \$				
710-10	ST11	VFY	INTG	\$ MAINLINE HAS NOT PROGRESSED	PAST MENG \$				
711-00		LABL	INTG		GO11				
711-06	ST10	VFY	INTG	\$ MAINLINE HAS NOT PROGRESSED	PAST MSEQ \$				
711-10	ST11	VFY	INTG	\$ MAINLINE HAS NOT PROGRESSED	PAST MENG \$				
712-00		LABL	INTG		GO12				
712-01		VFY	INTG	DPS I/O FAILURE	N031S168D				DISPLAY
713-00		LABL	INTG		GO13				
713-02		VFY	INTG	GLS-GO FOR I-9 GLS START	M009				
713-03		VFY	INTG	GLS-GO FOR OAA RETRACT	M00A				
713-04		VFY	INTG	GLS-GO FOR APU START	MAPU				
713-05		VFY	INTG	GLS-GO FOR PURGE SEQ.4	MPS4				
713-06		VFY	INTG	GLS-GO ET LO2 PRE-PRESSURIZATION	MLOX				
713-07		VFY	INTG	GLS-GO FOR ET LH2 REPLN TERM	MLH2				
713-08		VFY	INTG	GLS-GO FOR AUTO SEQ START	MSEQ				
713-09		VFY	INTG	GLS-GO FOR S3ME IGNITION	MENG				
713-10		VFY	INTG	GLS-GO FOR SRB IGNITION	MSRB				
713-11		VFY	INTG	GLS-NO LCC-1 FAILURES	LCC-1				
713-12		VFY	INTG	GLS-NO LCC-2 FAILURES	LCC-2				
713-13		VFY	INTG	GLS-NO LCC-3 FAILURES	LCC-3				
713-14		VFY	INTG	GLS-NO LCC-4 FAILURES	LCC-4				
713-15		VFY	INTG	MANUAL HOLD					
713-17		MSG	INTG	START TERM LOX RPL					
713-19		CMD	INTG	LOX HOLD AVAILABLE TIMER ACTIV.	GCDKTM3E				
713-21	ST10	MSG	INTG	SKIPPED LOX REPLENISH IERM					
714-00		LABL	INTG						
715-00		LABL	INTG						
715-01		VFY	INTG	GLS MAINLINE CONSOLE	GO15				
715-02		VFY	INTG	\$ MAINLINE HAS NOT PROGRESSED	PAST M009 \$				
715-03		VFY	INTG	BACKUP TYPE II CONSOLE GO MODE	SBKUPGO				
715-04	ST10	VFY	INTG	BACKUP TYPE II CONSOLE GO MODE	SBKUPGO				
715-05	ST11	VFY	INTG	BACKUP TYPE II CONSOLE GO MODE	SBKUPGO				



SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	VALUE	ELSE	DURATION	LCC
CD	CLOCK	E	DESIGNATOR	SINGL	SOR	LO	HIGH	UNIT	FACE
717-07	ST10	MSG	INTG	SKIPPED	CENTAUR	PRESS			
815-01		VFY	INTG	SITE			KSCA	GTO S70	
838-00	370	VFY	INTG	SITE			KSCB	GTO S90	
894-00		K	LABL	INTG			P005	GTO S200	
865-00	S90	MSG	KINTG	SME	HEATSHIELD	WATER SPRAY INITIATED	VLS		
714-09		VFY	INTG	SITE			N03IS007E	ON	
216-00		VFY	LH2	LH2	FLIGHT	MASS	N004INTGR	LH2	INHB MLH2
218-02		COM	LH2	GO	FOR	LH2 REPLENISH	TERM		
220-00		VFY	LH2	LH2	REPL	TERM	IN PROGRESS		INHB MSEQ
222-00		CVFY	LH2	ET	LH2	ULLAGE	PRESS NO.1	44.1	PSIA
222-01		CVFY	LH2	ET	LH2	ULLAGE	PRESS NO.2	44.1	PSIA
222-02		CVFY	LH2	ET	LH2	ULLAGE	PRESS NO.3	44.1	PSIA
224-00		VFY	LH2	ET	LH2	LOW LEVEL	LIQ SENSOR NO.1		INHB MSEQ
224-01		VFY	LH2	ET	LH2	LOW LEVEL	LIQ SENSOR NO.2		INHB MSEQ
224-02		VFY	LH2	ET	LH2	LOW LEVEL	LIQ SENSOR NO.3		INHB MSEQ
224-03		VFY	LH2	ET	LH2	LOW LEVEL	LIQ SENSOR NO.4		INHB MSEQ
242-00		VFY	LH2	LH2	PREPRESS	CYCLE FAIL			INHB MSEQ
311-01		COM	LH2	STS	LIFTOFF	COMM INTERRUPT			5.1-6
508-00		CMD	LH2	A75616	ET	PRS PR	CTL VLV 0	OFF	
508-01		CMD	LH2	A75617	ET	PRESS	SEC CTL VLV OP C	OFF	
508-02		CMD	LH2	A75610	ET	PRESS	SOV CL CMD	OFF	
568-02		CMD	LH2	GO	FOR	SAFING			
571-02		VFY	LH2	FD	35	ALARM	ON	IND	DISPLAY
706-01		VFY	LH2	REPLACE	LH2	ULLAGE	PRESS NO1	XDC	DISPLAY
706-02		VFY	LH2	REPLACE	LH2	ULLAGE	PRESS NO2	XDC	DISPLAY
706-03		VFY	LH2	REPLACE	LH2	ULLAGE	PRESS NO3	XDC	DISPLAY
706-04		CMD	LH2	REPLACE	LH2	ULLAGE	PRESS NO1	XDC	
706-05		CMD	LH2	REPLACE	LH2	ULLAGE	PRESS NO1	XDC	
706-07		CVFY	LH2	ET	LH2	ULLAGE	PRESS NO.1		INHB MSEQ
706-08		CVFY	LH2	ET	LH2	ULLAGE	PRESS NO.2		INHB MSEQ
706-09		CVFY	LH2	ET	LH2	ULLAGE	PRESS NO.3		INHB MSEQ
706-11		CVFY	LH2	ET	LH2	ULLAGE	PRESS NO.1		2 OF 3
706-12		CVFY	LH2	ET	LH2	ULLAGE	PRESS NO.2		PSIA
706-13		CVFY	LH2	ET	LH2	ULLAGE	PRESS NO.3		PSIA
707-01		VFY	LH2	REPLACE	LH2	ULLAGE	PRESS NO1	XDC	DISPLAY
707-02		VFY	LH2	REPLACE	LH2	ULLAGE	PRESS NO2	XDC	DISPLAY
707-03		VFY	LH2	REPLACE	LH2	ULLAGE	PRESS NO3	XDC	DISPLAY
707-04		CMD	LH2	REPLACE	LH2	ULLAGE	PRESS NO2	XDC	
707-05		CMD	LH2	REPLACE	LH2	ULLAGE	PRESS NO2	XDC	
707-07		CVFY	LH2	ET	LH2	ULLAGE	PRESS NO.1		INHB MSEQ
707-08		CVFY	LH2	ET	LH2	ULLAGE	PRESS NO.2		INHB MSEQ





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GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD SIS 33

OMI S90C5 - L

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
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707-09	CVFY LH2	ET LH2	ULLAGE PRESS NO.3		T41P1702C1	40.9	44.1	PSIA	INHB MSEQ	
707-11	CVFY LH2	ET LH2	ULLAGE PRESS NO.1		T41P1700C1	40.9	44.1	PSIA	2 OF 3	
707-12	CVFY LH2	ET LH2	ULLAGE PRESS NO.2		T41P1701C1	40.9	44.1	PSIA	2 OF 3	
707-13	CVFY LH2	ET LH2	ULLAGE PRESS NO.3		T41P1702C1	40.9	44.1	PSIA	EXIT	TIL MENG
708-01	VFY LH2	REPLACE LH2	ULLAGE PRESS NO1 XDC		N41K1700X	OFF			DISPLAY	GTO ST10
708-03	VFY LH2	REPLACE LH2	ULLAGE PRESS NO2 XDC		N41K1701X	OFF			DISPLAY	GTO ST10
708-04	CMD LH2	REPLACE LH2	ULLAGE PRESS NO3 XDC		V41K17C2X	ON			DISPLAY	GTO ST10
708-05	CMD LH2	REPLACE LH2	ULLAGE PRESS NO3 XDC		N41K1702X	ON				
708-07	CVFY LH2	ET LH2	ULLAGE PRESS NO.1		T41P1700C1	40.9	44.1	PSIA	INHB MSEQ	
708-08	CVFY LH2	ET LH2	ULLAGE PRESS NO.2		T41P1701C1	40.9	44.1	PSIA	INHB MSEQ	
708-09	CVFY LH2	ET LH2	ULLAGE PRESS NO.3		T41P1702C1	40.9	44.1	PSIA	INHB MSEQ	
708-11	CVFY LH2	ET LH2	ULLAGE PRESS NO.1		T41P1700C1	40.9	44.1	PSIA	2 OF 3	
708-12	CVFY LH2	ET LH2	ULLAGE PRESS NO.2		T41P1701C1	40.9	44.1	PSIA	2 OF 3	
708-13	CVFY LH2	ET LH2	ULLAGE PRESS NO.3		T41P1702C1	40.9	44.1	PSIA	EXIT	TIL MENG
186-01	VFY L02	ET L02	TANK HE BUBBL DIFF PRESS		GLOP4644A	N0L0	.1	PSID	1 OF 3	5.1-5
186-02	VFY L02	ET L02	TANK HE BUBBL DIFF PRESS		GLOP4144A	N0L0	.1	PSID	1 OF 3	5.1-5
186-03	VFY L02	HELIUM BUBBLING SUPPLY PRESS		GLOP4134A	N0L0	125		PSIG	OR	5.1-5
186-04	VFY L02	HE BUBBLING FLO CNTL VLV(PRI) OP		GLOX4143E	OFF				2 OF 2	5.1-5
186-05	VFY L02	HE BUBBL FL CNTL VLV (SEC) OP		GLOX4643E	OFF				INHB MSEQ	5.1-5
199-13	COM L02	GO FOR ET LOX PRE-PRESSURIZATION		NOC5INTGR	L02					
204-00	VFY L02	ET LOX PRESSURIZATION IN PROGRES		N03ISOC9E	ON				INHB MSEQ	PL
214-00	CVFY L02	ET L02	ULLAGE PRESSURE NO.1		T41P1750C1	19.3	22.5	PSIG	CPER G009	TIL MENG 5.1-8
214-01	CVFY L02	ET L02	ULLAGE PRESSURE NO.2		T41P1751C1	19.3	22.5	PSIG	CPER G010	TIL MENG 5.1-8
214-02	CVFY L02	ET L02	ULLAGE PRESSURE NO.3		T41P1752C1	19.3	22.5	PSIG	CPER G011	TIL MENG 5.1-8
224-04	VFY L02	ET L02	ECO SENSOR NO. 1		V41X1555X1	WET			INHB MSEQ	6.2.1-16
224-05	VFY L02	ET L02	ECO SENSOR NO. 2		V41X1556X1	WET			INHB MSEQ	6.2.1-16
224-06	VFY L02	ET L02	ECO SENSOR NO. 3		V41X1557X1	WET			INHB MSEQ	6.2.1-16
224-07	VFY L02	ET L02	ECO SENSOR NO. 4		V41X1558X1	WET			INHB MSEQ	6.2.1-16
311-00	COM L02	STS LIFTOFF COMM INTERRUPT		N014INTGR	L02					
507-00	CMD L02	A75082 ET HE PRI PREPRESS VLV OP		GLOK2001E	OFF					
507-01	CMD L02	A75080 ET HE PREPRESS SHUTOFF VL		GLOK2031E	ON					
507-02	CMD L02	A75086 ET HE SEC PREPRESS VLV OP		GLOK3001E	OFF					
568-01	CMD L02	GO FOR SAFING		N013INTGR	ON					
709-01	VFY L02	REPLACE L02	ULLAGE PRESS NO1 XDC		N41K1750X	OFF			DISPLAY	GTO ST10
709-02	VFY L02	REPLACE L02	ULLAGE PRESS NO2 XDC		N41K1751X	OFF			DISPLAY	GTO ST10
709-03	VFY L02	REPLACE L02	ULLAGE PRESS NO3 XDC		N41K1752X	OFF			DISPLAY	GTO ST10
709-04	CMD L02	REPLACE L02	ULLAGE PRESS NO1 XDC		V41K175CXL	ON				
709-05	CMD L02	REPLACE L02	ULLAGE PRESS NO1 XDC		N41K1750X	ON				
709-07	CVFY L02	ET L02	ULLAGE PRESSURE NO.1		T41P175CC1	19.3	22.5	PSIG	INHB MSEQ	
709-08	CVFY L02	ET L02	ULLAGE PRESSURE NO.2		T41P1751C1	19.3	22.5	PSIG	INHB MSEQ	

SEQ	TIME	CD	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
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709-09	CVFY L02		ET L02	ULLAGE PRESSURE NO.3		T41P1752C1	19.3	22.5	PSIG	INHB MSEQ	
709-11	CVFY L02		ET L02	ULLAGE PRESS NO.1		T41P1750C1	19.3	22.5	PSIG	2 OF 3	
709-12	CVFY L02		ET L02	ULLAGE PRESS NO.2		T41P1751C1	19.3	22.5	PSIG	2 OF 3	
709-13	CVFY L02		ET L02	ULLAGE PRESS NO.3		T41P1752C1	19.3	22.5	PSIG	EXIT	TIL MENG
710-01	VFY L02		REPLACE L02	ULLAGE PRESS NO1 XDC	OFF	N41K1750X	OFF			DISPLAY	GTO ST10
710-02	VFY L02		REPLACE L02	ULLAGE PRESS NO2 XDC	OFF	N41K1751X	OFF			DISPLAY	GTO ST10
710-03	VFY L02		REPLACE L02	ULLAGE PRESS NO3 XDC	OFF	N41K1752X	OFF			DISPLAY	GTO ST10
710-04	CMD L02		REPLACE L02	ULLAGE PRESS NO2 XDC		V41K1751XL	ON				
710-05	CMD L02		REPLACE L02	ULLAGE PRESS NO2 XDC		N41K1751X	ON				
710-07	CVFY L02		ET L02	ULLAGE PRESSURE NO.1		T41P1750C1	19.3	22.5	PSIG	INHB MSEQ	
710-08	CVFY L02		ET L02	ULLAGE PRESSURE NO.2		T41P1751C1	19.3	22.5	PSIG	INHB MSEQ	
710-09	CVFY L02		ET L02	ULLAGE PRESSURE NO.3		T41P1752C1	19.3	22.5	PSIG	INHB MSEQ	
710-11	CVFY L02		ET L02	ULLAGE PRESS NO.1		T41P1750C1	19.3	22.5	PSIG	2 OF 3	
710-12	CVFY L02		ET L02	ULLAGE PRESS NO.2		T41P1751C1	19.3	22.5	PSIG	2 OF 3	
710-13	CVFY L02		ET L02	ULLAGE PRESS NO.3		T41P1752C1	19.3	22.5	PSIG	EXIT	TIL MENG
711-01	VFY L02		REPLACE L02	ULLAGE PRESS NO1 XDC	OFF	N41K175CX	OFF			DISPLAY	GTO ST10
711-02	VFY L02		REPLACE L02	ULLAGE PRESS NO2 XDC	OFF	N41K1751X	OFF			DISPLAY	GTO ST10
711-03	VFY L02		REPLACE L02	ULLAGE PRESS NO3 XDC	OFF	N41K1752X	OFF			DISPLAY	GTO ST10
711-04	CMD L02		REPLACE L02	ULLAGE PRESS NO3 XDC		V41K1752XL	ON				
711-05	CMD L02		REPLACE L02	ULLAGE PRESS NO3 XDC		N41K1752X	ON				
711-07	CVFY L02		ET L02	ULLAGE PRESSURE NO.1		T41P1750C1	19.3	22.5	PSIG	INHB MSEQ	
711-08	CVFY L02		ET L02	ULLAGE PRESSURE NO.2		T41P1751C1	19.3	22.5	PSIG	INHB MSEQ	
711-09	CVFY L02		ET L02	ULLAGE PRESSURE NO.3		T41P1752C1	19.3	22.5	PSIG	INHB MSEQ	
711-11	CVFY L02		ET L02	ULLAGE PRESS NO.1		T41P1750C1	19.3	22.5	PSIG	2 OF 3	
711-12	CVFY L02		ET L02	ULLAGE PRESS NO.2		T41P1751C1	19.3	22.5	PSIG	2 OF 3	
711-13	CVFY L02		ET L02	ULLAGE PRESS NO.3		T41P1752C1	19.3	22.5	PSIG	EXIT	TIL MENG
713-01	VFY L02		LOX FLIGHT MASS			N031S008E	ON			INHB MPS4	PL
713-16	CMD L02		GO FOR TERMINATE	LOX REPLENISH		N0C7INTGR	ON				PL
713-18	VFY L02		LOX REPL TERMINATE	IN PROGRESS		N031S01CE	ON			INHB MPS4	PL
166-00	VFY MECH		LMG STR ACTR	SHUTTLE V GR DN RDY		V58X1725E1	ON			INHB MSEQ	6.7.1-28
166-01	VFY MECH		RMG STR ACTR	SHUTTLE V GR DN RDY		V58X1775E1	ON			INHB MSEQ	6.7.1-28
166-02	VFY MECH		NMG STR ACTR	SHUTTLE V GR DN RDY		V58X1825E1	ON			INHB MSEQ	6.7.1-28
108-01	ICL MPS		MPS-PNEU VLV	HE RGLTR OUTLET PRE		V41P1605A1					
108-02	ICL MPS		MPS E1	HELIUM REG A OUTLET PRESS		V41P1154A1					
108-03	ICL MPS		MPS E1	HELIUM REG B OUTLET PRESS		V41P1153A1					
108-04	ICL MPS		MPS E2	HELIUM REG A OUTLET PRESS		V41P1254A1					
108-05	ICL MPS		MPS E2	HELIUM REG B OUTLET PRESS		V41P1253A1					
108-06	ICL MPS		MPS E3	HELIUM REG A OUTLET PRESS		V41P1354A1					
108-07	ICL MPS		MPS E3	HELIUM REG B OUTLET PRESS		V41P1353A1					
108-08	ICL MPS		MPS-LH2	ENG MANIFOLD PRESSURE		V41P1433C1					
108-09	ICL MPS		MPS-ENG NO 1	HELIUM SUPPLY PRESS		V41P115CC1					

SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
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108-10	ICL	MPS		MPS-PNEUMATIC VLV HE SUPPLY PRES	V41P1600A1				
108-11	ICL	MPS		MPS-LOX ENGINE MANIFOLD PRESS	V41P1533C1				
114-03	ACL	MPS		MPS-ENG NO 2 HELIUM SUPPLY PRESS	V41P1250C1				
114-04	ACL	MPS		MPS-ENG NO 3 HELIUM SUPPLY PRESS	V41P1350C1				
157-00	VFY	MPS		E-1 AFT FUSLG HELIUM SUPPLY TEMP	V41T1151A1 10	95	DEGF	1 OF 3	6.2.1-4
157-01	VFY	MPS		E-2 AFT FUSLG HELIUM SUPPLY TEMP	V41T1251A1 10	95	DEGF	1 OF 3	6.2.1-4
157-02	VFY	MPS		E-3 AFT FUSLG HELIUM SUPPLY TEMP	V41T1351A1 10	95	DEGF	INHB MPS4	6.2.1-4
157-03	VFY	MPS		E-1 MID FUSLG HELIUM SUPPLY TEMP	V41T1152A1 60	145	DEGF	1 OF 3	6.2.1-4
157-04	VFY	MPS		E-2 MID FUSLG HELIUM SUPPLY TEMP	V41T1252A1 60	145	DEGF	1 OF 3	6.2.1-4
157-05	VFY	MPS		E-3 MID FUSLG HELIUM SUPPLY TEMP	V41T1352A1 60	145	DEGF	INHB MPS4	6.2.1-4
172-00	CVFY	MPS		MPS E-1 HE REG A OUTLET PRESS	V41P1154A1 715	800	PSIA	INHB MSEQ	6.2.1-5
172-01	CVFY	MPS		MPS E-1 HE REG B OUTLET PRESS	V41P1153A1 715	800	PSIA	INHB MSEQ	6.2.1-5
172-02	CVFY	MPS		MPS E-2 HE REG A OUTLET PRESS	V41P1254A1 715	800	PSIA	INHB MSEQ	6.2.1-5
172-03	CVFY	MPS		MPS E-2 HE REG B OUTLET PRESS	V41P1253A1 715	800	PSIA	INHB MSEQ	6.2.1-5
172-04	CVFY	MPS		MPS E-3 HE REG A OUTLET PRESS	V41P1354A1 715	800	PSIA	INHB MSEQ	6.2.1-5
172-05	CVFY	MPS		MPS E-3 HE REG B OUTLET PRESS	V41P1353A1 715	800	PSIA	INHB MSEQ	6.2.1-5
172-06	CVFY	MPS		PNEU VLV HE RGLTR OUTLET PRESS	V41P1605A1 715	800	PSIA	INHB MSEQ	6.2.1-5
172-07	CVFY	MPS		PNEU HELIUM SUPPLY PRESS	V41P1600A1 4000	4500	PSIA	3 OF 4	6.2.1-2
172-08	CVFY	MPS		ENG 1 HELIUM SUPPLY PRESS	V41P1150C1 4000	4500	PSIA	3 OF 4	6.2.1-2
172-09	CVFY	MPS		ENG 2 HELIUM SUPPLY PRESS	V41P1250C1 4000	4500	PSIA	3 OF 4	6.2.1-2
172-10	CVFY	MPS		ENG 3 HELIUM SUPPLY PRESS	V41P1350C1 4000	4500	PSIA	INHB MSEQ	6.2.1-2
220-01	CVFY	MPS		MPS-2 LOX INLET TEMP	V41T1131C1 -291.4	NOHI	DEGF	2 OF 3	6.2.1-21
220-02	CVFY	MPS		MPS-3 LOX INLET TEMP	V41T1231C1 -291.4	NOHI	DEGF	2 OF 3	6.2.1-21
220-03	CVFY	MPS		MPS-3 LOX INLET TEMP	V41T1331C1 -291.4	NOHI	DEGF	INHB MSEQ	6.2.1-21
225-00	VFY	MPS		MPS-LOX FEED DISC VLV OPEN PWR 0	V41X1807E1 ON			2 OF 2	6.2.1-12
225-01	VFY	MPS		MPS-LOX FEED DISC VLV CLOSE PWR	V41X1806E1 OFF			OR	6.2.1-12
225-02	VFY	MPS		MPS-LOX FEED DISC VLV OPEN	V41X1529X1 ON			INHB MSEQ	6.2.1-12
225-03	VFY	MPS		LOX DISCONNECT CLOSED A	V41X1530X1 OFF			INHB MSEQ	6.2.1-12
225-04	VFY	MPS		LOX DISCONNECT CLOSED B	V41X1534X1 OFF			INHB MSEQ	6.2.1-12
225-05	VFY	MPS		MPS-LH2 FEED DISC VLV OPEN PWR 0	V41X1382E1 ON			2 OF 2	6.2.1-12
225-06	VFY	MPS		MPS-LH2 FEED DISC VLV CLOSE PWR	V41X1381E1 OFF			OR	6.2.1-12
225-07	VFY	MPS		LH2 DISCONNECT CLOSED A	V41X1429X1 ON			INHB MSEQ	6.2.1-12
225-08	VFY	MPS		LH2 DISCONNECT CLOSED B	V41X1430X1 OFF			INHB MSEQ	6.2.1-12
225-09	VFY	MPS		LH2 INBD FILL VALVE OPEN	V41X1434X1 OFF			INHB MSEQ	6.2.1-12
225-10	VFY	MPS		LH2 INBD FILL VALVE OP PWR	V41X1409E1 OFF			3 OF 3	6.2.1-6
225-11	VFY	MPS		LH2 INBD FILL VALVE CL PWR	V41X1406E1 OFF			3 OF 3	6.2.1-6
225-12	VFY	MPS		LH2 INBD FILL VALVE CLOSED	V41X1405E1 ON			OR	6.2.1-6
225-13	VFY	MPS		LH2 TIPPING VALVE OPEN	V41X1410X1 ON			INHB MSEQ	6.2.1-6
225-14	VFY	MPS		LH2 TIPPING VALVE OP PWR	V41X1453E1 OFF			2 OF 2	6.2.1-10
225-15	VFY	MPS		LH2 TIPPING VALVE CLOSED	V41X1458E1 OFF			OR	6.2.1-10
225-16	VFY	MPS		LH2 TIPPING VALVE CLOSED	V41X1456X1 ON			INHB MSEQ	6.2.1-10

SEQ	S	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	FACE
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225-17	VFY	MPS		LH2	FEEDLINE	RELIEF SOV OPEN	V41X1441E1	OFF	2 OF 2		6.2.1-13	
225-18	VFY	MPS		LH2	FEEDLINE	RELIEF SOV CL PWR	V41X1449E1	ON	OR		6.2.1-13	
225-19	VFY	MPS		LH2	FEEDLINE	RELIEF SOV CLOSED	V41X1442E1	ON	INHB	MSEQ	6.2.1-13	
225-20	VFY	MPS		LH2	RTLS	OTBD D/V OPEN	V41X1917E1	OFF	2 OF 2		6.2.1-14	
225-21	VFY	MPS		LH2	RTLS	OTBD D/V OP PWR	V41X1911E1	OFF	OR		6.2.1-14	
225-22	VFY	MPS		LH2	RTLS	OTBD D/V CLOSED	V41X1919X1	ON	INHB	MSEQ	6.2.1-14	
225-23	VFY	MPS		LH2	RTLS	INBD D/V OPEN	V41X1927E1	OFF	2 OF 2		6.2.1-14	
225-24	VFY	MPS		LH2	RTLS	INBD D/V OP PWR	V41X1921E1	OFF	OR		6.2.1-14	
225-25	VFY	MPS		LH2	RTLS	INBD D/V CLOSED	V41X1929X1	ON	INHB	MSEQ	6.2.1-14	
225-26	VFY	MPS		L02	FEEDLINE	RELIEF SOV OPEN	V41X1541E1	OFF	2 OF 2		6.2.1-13	
225-27	VFY	MPS		L02	FEEDLINE	RELIEF SOV CL PWR	V41X1549E1	ON	OR		6.2.1-13	
225-28	VFY	MPS		L02	FEEDLINE	RELIEF SOV CLOSED	V41X1542E1	ON	INHB	MSEQ	6.2.1-13	
225-29	VFY	MPS		L02	INBD	FILL VALVE OPEN	V41X1510E1	OFF	3 OF 3		6.2.1-8	
225-30	VFY	MPS		L02	INBD	FILL VALVE OP PWR	V41X1506E1	OFF	3 OF 3		6.2.1-8	
225-31	VFY	MPS		L02	INBD	FILL VALVE CL PWR	V41X1505E1	ON	OR		6.2.1-8	
225-32	VFY	MPS		L02	INBD	FILL VALVE CLOSED	V41X1509X1	ON	INHB	MSEQ	6.2.1-8	
225-33	VFY	MPS		LH2	FEED	DISCONNECT TEMP	V41T1428A1	NOLO	1 OF 2		6.2.1-11	
225-34	VFY	MPS		HI	PT	BLEED TEMP	GLHT4119A	NOLO	INHB	MSEQ	6.2.1-11	
236-00	CMD	MPS		MPS	L02	OTBD FILL VALVE CL CMD	V41K1515XL	ON				
236-01	CMD	MPS		MPS	L02	OTBD FILL VALVE OP CMD	V41K1518XL	OFF				
236-02	CMD	MPS		MPS	L02	OTBD FILL VALVE OP CMD	V41K1518NL	OFF				
236-03	CMD	MPS		MPS	LH2	OTBD FILL VALVE CL CMD	V41K1393XL	ON				
236-04	CMD	MPS		MPS	LH2	OTBD FILL VALVE OP CMD	V41K1391XL	OFF				
236-05	CMD	MPS		MPS	LH2	OTBD FILL VALVE OP CMD	V41K1391NL	OFF				
249-00	VFY	MPS		MPS	L02	OTBD FILL VLV OPEN	V41X1513E1	OFF	3 OF 3		6.2.1-9	
249-01	VFY	MPS		MPS	LOX	OTBD FILL VLV CLOSE PWR	V41X1507E1	ON	3 OF 3		6.2.1-9	
249-02	VFY	MPS		MPS	LOX	OTBD FILL VLV OPEN PWR 0	V41X1508E1	OFF	OR		6.2.1-9	
249-03	VFY	MPS		MPS	L02	OTBD FILL VLV CLOSED	V41X1514X1	ON	INHB	MSEQ	6.2.1-9	
249-20	VFY	MPS		MPS	LH2	OUTBD FILL VLV OPEN	V41X1388E1	OFF	3 OF 3		6.2.1-7	
249-21	VFY	MPS		MPS	LH2	OUTBD FILL VLV CLOSE PWR	V41X1385E1	ON	3 OF 3		6.2.1-7	
249-22	VFY	MPS		MPS	LH2	OUTBD FILL VLV OPEN PWR	V41X1386E1	OFF	OR		6.2.1-7	
249-23	VFY	MPS		MPS	LH2	OUTBD FILL VLV CLOSED	V41X1389X1	ON	INHB	MSEQ	6.2.1-7	
281-00	CMD	MPS		MPHE	FILL	CLOSE OVR	GHEK1008E	OFF				
281-01	CMD	MPS		MPHE	FILL	CLOSE OVR (R)	GHEK1108E	OFF				
281-02	CMD	MPS		MPHE	FILL	SYS CLOSE CMD	GHEK1000E	ON				
281-03	CMD	MPS		MPHE	FILL	SYS CLOSE CMD (R)	GHEK1100E	ON				
281-04	CMD	MPS		MPHE	FILL	VENT OVR	GHEK1017E	OFF				
281-05	CMD	MPS		MPHE	FILL	VENT OVR (R)	GHEK1127E	OFF				
281-06	CMD	MPS		MPHE	FILL	OUTPUT VENT OPEN CMD	GHEK1101E	ON				
281-07	CMD	MPS		MPHE	FILL	OUTPUT VENT OPEN CMD(R)	GHEK1120E	ON				
282-05	CMD	MPS		EXPOSED	PRI	FIRE DETS OFF CMD	GLHK7490E	ON				

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	S
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282-06			CMD	MPS	EXPOSED SEC FIRE DEFS OFF CMD		GLHK750CE	ON			
292-00			CMD	MPS	IT111 LH2 PUMP1 PRI BUS CMD		GLHK0173E	OFF			
292-01			CMD	MPS	IT112 LH2 PUMP2 PRI BUS CMD		GLHK0174E	OFF			
292-02			CMD	MPS	IT113 LH2 PUMP3 PRI BUS CMD		GLHK0175E	OFF			
292-03			CMD	MPS	IT211 LH2 PUMP1 BUS CMD		GLHK0276E	OFF			
292-04			CMD	MPS	IT212 LH2 PUMP2 BUS CMD		GLHK0277E	OFF			
292-05			CMD	MPS	IT213 LH2 PUMP3 BUS CMD		GLHK0278E	OFF			
293-00			CMD	MPS	LH2 HI POINT BLEED VLV OPEN CMD A		V41K1465NL	OFF			
293-01			CMD	MPS	LH2 HI POINT BLEED VLV OPEN CMD B		V41K1466NL	OFF			
293-02			CMD	MPS	LH2 RECIRC VLVs OPEN CMD		V41K1111NL	OFF			
515-01			CMD	MPS	IT111 LH2 PUMP 1 PRI BUS CMD		GLHK0173E	OFF			
515-02			CMD	MPS	IT112 LH2 PUMP 2 PRI BUS CMD		GLHK0174E	OFF			
515-03			CMD	MPS	IT113 LH2 PUMP 3 PRI BUS CMD		GLHK0175E	OFF			
515-04			CMD	MPS	IT211 LH2 PUMP 1 BUS CMD		GLHK0276E	OFF			
515-05			CMD	MPS	IT212 LH2 PUMP 2 BUS CMD		GLHK0277E	OFF			
515-06			CMD	MPS	IT213 LH2 PUMP 3 BUS CMD		GLHK0278E	OFF			
515-07			CMD	MPS	LH2 HI POINT BLEED VLV OPEN CMD A		V41K1465NL	OFF			
515-08			CMD	MPS	LH2 HI POINT BLEEN VLV OPEN CMD B		V41K1466NL	OFF			
515-09			CMD	MPS	LH2 RECIRC VLVs OPEN CMD		V41K1111NL	OFF			
522-00			CMD	MPS	L02 OVERBOARD B/V CLOSE CMD A		V41K1584XL	OFF			
522-01			CMD	MPS	L02 OVERBOARD B/V CLOSE CMD B		V41K1585XL	OFF			
522-02			CMD	MPS	L02 OVERBOARD B/V CLOSE CMD C		V41K1586XL	OFF			
537-00			VFY	MPS	LOX OVBD BLD VLV OP IND		V41X1587E1	ON	DISPLAY		
537-01			VFY	MPS	LOX OVBD BLD VLV CLA IND		V41X1580X1	OFF	1 OF 2		
537-02			VFY	MPS	LOX OVBD BLD VLV CLB IND		V41X1581X1	OFF	DISPLAY		
560-00			VFY	MPS	ME-1 L02 PREVLV CLOSE IND		V41X1135E1	OFF	GTO ST371		
560-01			CMD	MPS	E-1 L02 PREVLV OPEN CMD A		V41K1136XL	ON			
560-02			CMD	MPS	E-1 L02 PREVLV OPEN CMD B		V41K1137XL	ON			
560-03			CMD	MPS	E-1 L02 PREVLV OPEN CMD C		V41K1138XL	ON			
560-04			CMD	MPS	E-1 L02 PREVLV OPEN CMD D		V41K1143XL	ON			
560-05			CMD	MPS	E-1 L02 PREVLV CLOSED CMD A		V41K1139XL	ON			
560-06			CMD	MPS	E-1 L02 PREVLV CLOSED CMD B		V41K1140XL	ON			
560-07			CMD	MPS	E-1 L02 PREVLV CLOSED CMD C		V41K1141XL	ON			
560-08			CMD	MPS	E-1 L02 PREVLV CLOSED CMD D		V41K1142XL	ON			
560-09			CMD	MPS	E-1 L02 PREVLV OPEN CMD A		V41K1136XL	OFF			
560-10			CMD	MPS	E-1 L02 PREVLV OPEN CMD B		V41K1137XL	OFF			
560-11			CMD	MPS	E-1 L02 PREVLV OPEN CMD C		V41K1138XL	OFF			
560-12			CMD	MPS	E-1 L02 PREVLV OPEN CMD D		V41K1143XL	OFF			
561-00			VFY	MPS	E-1 LH2 PREVLV CLOSED IND		V41X1105E1	OFF			
561-01			CMD	MPS	E-1 LH2 PREVLV OPEN CMD A		V41K1115XL	ON	GTO ST372		
561-02			CMD	MPS	E-1 LH2 PREVLV OPEN CMD B		V41K112CXL	ON			



SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FLNCTICN	VALUE	ELSE	DURATION	LCC	PAGE
:	:	:	:	:	:	:	:	:	:	:	:
:	:	CD	:	:	:	DESIGNATOR	SINGL	:	:	:	:
:	:	CLOCK	E	:	:	:	OR	LO	HIGH	UNIT	:
:	:	:	:	:	:	:	:	:	:	:	:
561-03	CMD	MPS	E-1	LH2	PREVLV OPEN CMD C	V41K1121XL	ON				
561-04	CMD	MPS	E-1	LH2	PREVLV CLOSE CMD A	V41K1122XL	ON				
561-05	CMD	MPS	E-1	LH2	PREVLV CLOSE CMD B	V41K1123XL	ON				
561-06	CMD	MPS	E-1	LH2	PREVLV CLOSE CMD C	V41K1124XL	ON				
561-07	CMD	MPS	E-1	LH2	PREVLV OPEN CMD A	V41K1119XL	OFF				
561-08	CMD	MPS	E-1	LH2	PREVLV OPEN CMD B	V41K1120XL	OFF				
561-09	CMD	MPS	E-1	LH2	PREVLV OPEN CMD C	V41K1121XL	OFF				
561-14	VFY	MPS	ME-2	L02	PREVLV CLOSE IND	V41X1235E1	OFF				
561-15	CMD	MPS	E-2	L02	PREVLV OPEN CMD A	V41K1236XL	ON				
561-16	CMD	MPS	E-2	L02	PREVLV OPEN CMD B	V41K1237XL	ON				
561-17	CMD	MPS	E-2	L02	PREVLV OPEN CMD C	V41K1238XL	ON				
561-18	CMD	MPS	E-2	L02	PREVLV OPEN CMD D	V41K1243XL	ON				
561-19	CMD	MPS	E-2	L02	PREVLV CLOSE CMD A	V41K1239XL	ON				
561-20	CMD	MPS	E-2	L02	PREVLV CLOSE CMD B	V41K1240XL	ON				
561-21	CMD	MPS	E-2	L02	PREVLV CLOSE CMD C	V41K1241XL	ON				
561-22	CMD	MPS	E-2	L02	PREVLV CLOSE CMD D	V41K1242XL	ON				
561-23	CMD	MPS	E-2	L02	PREVLV OPEN CMD A	V41K1236XL	OFF				
561-24	CMD	MPS	E-2	L02	PREVLV OPEN CMD B	V41K1237XL	OFF				
561-25	CMD	MPS	E-2	L02	PREVLV OPEN CMD C	V41K1238XL	OFF				
561-26	CMD	MPS	E-2	L02	PREVLV OPEN CMD D	V41K1243XL	OFF				
562-00	VFY	MPS	ME-2	LH2	PREVLV CLOSE IND	V41X1205E1	OFF				
562-01	CMD	MPS	E-2	LH2	PREVLV OPEN CMD A	V41K1219XL	ON				
562-03	CMD	MPS	E-2	LH2	PREVLV OPEN CMD B	V41K1220XL	ON				
562-04	CMD	MPS	E-2	LH2	PREVLV OPEN CMD C	V41K1221XL	ON				
562-05	CMD	MPS	E-2	LH2	PREVLV CLOSE CMD A	V41K1222XL	ON				
562-06	CMD	MPS	E-2	LH2	PREVLV CLOSE CMD B	V41K1223XL	ON				
562-07	CMD	MPS	E-2	LH2	PREVLV CLOSE CMD C	V41K1224XL	ON				
562-08	CMD	MPS	E-2	LH2	PREVLV OPEN CMD A	V41K1219XL	OFF				
562-09	CMD	MPS	E-2	LH2	PREVLV OPEN CMD B	V41K1220XL	OFF				
562-10	CMD	MPS	E-2	LH2	PREVLV OPEN CMD C	V41K1221XL	OFF				
563-00	VFY	MPS	ME-3	L02	PREVLV CLOSE IND	V41X1335E1	OFF				
563-01	CMD	MPS	E-3	L02	PREVLV OPEN CMD A	V41K1336XL	ON				
563-02	CMD	MPS	E-3	L02	PREVLV OPEN CMD B	V41K1337XL	ON				
563-03	CMD	MPS	E-3	L02	PREVLV OPEN CMD C	V41K1338XL	ON				
563-04	CMD	MPS	E-3	L02	PREVLV OPEN CMD D	V41K1343XL	ON				
563-05	CMD	MPS	E-3	L02	PREVLV CLOSE CMD A	V41K1335XL	ON				
563-06	CMD	MPS	E-3	L02	PREVLV CLOSE CMD B	V41K1340XL	ON				
563-07	CMD	MPS	E-3	L02	PREVLV CLOSE CMD C	V41K1341XL	ON				
563-08	CMD	MPS	E-3	L02	PREVLV CLOSE CMD D	V41K1342XL	ON				
563-09	CMD	MPS	E-3	L02	PREVLV OPEN CMD A	V41K1336XL	OFF				
563-10	CMD	MPS	E-3	L02	PREVLV OPEN CMD B	V41K1337XL	OFF				

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

DATE 12-10-85

OMI 9905 - L

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
:	CD	:	:	:	:	DESIGNATOR	:	:	:	PAGE
:	CLOCK	:	:	:	:	OR LO	:	:	:	:
:	:	:	:	:	:	HIGH	:	:	:	:
:	:	:	:	:	:	UNIT	:	:	:	:

563-11			CMD	MPS	E-3 L02 PREVLV OPEN CMD C	V41K1338XL	OFF			
563-12			CMD	MPS	E-3 L02 PREVLV OPEN CMD D	V41K1343XL	OFF			
564-00	ST375		VFY	MPS	ME-3 LH2 PREVLV CLOSE IND	V41X1305E1	OFF			
564-01			CMD	MPS	E-3 LH2 PREVLV OPEN CMD A	V41K1319XL	ON			
564-02			CMD	MPS	E-3 LH2 PREVLV OPEN CMD B	V41K1320XL	ON			
564-03			CMD	MPS	E-3 LH2 PREVLV OPEN CMD C	V41K1321XL	ON			
564-04			CMD	MPS	E-3 LH2 PREVLV CLOSE CMD A	V41K1322XL	ON			
564-05			CMD	MPS	E-3 LH2 PREVLV CLOSE CMD B	V41K1323XL	ON			
564-06			CMD	MPS	E-3 LH2 PREVLV CLOSE CMD C	V41K1324XL	ON			
564-07			CMD	MPS	E-3 LH2 PREVLV OPEN CMD A	V41K1319XL	OFF			
564-08			CMD	MPS	E-3 LH2 PREVLV OPEN CMD B	V41K1320XL	OFF			
564-09			CMD	MPS	E-3 LH2 PREVLV OPEN CMD C	V41K1321XL	OFF			
566-00			VFY	MPS	LOX OVBD BLD VLV OP IND	V41X1587E1	ON			
566-01			VFY	MPS	LOX OVBD BLD VLV CLA IND	V41X1580X1	OFF			
566-02			VFY	MPS	LOX OVBD BLD VLV CLB IND	V41X1581X1	OFF			
567-00	ST377		CMD	MPS	MPS L02 ACC RECIRC VLV 1 CL CMDA	V41K1815XL	ON			
567-01			CMD	MPS	MPS L02 ACC RECIRC VLV 1 CL CMDB	V41K1816XL	ON			
567-02			CMD	MPS	MPS L02 ACC RECIRC VLV 2 CL CMDA	V41K1825XL	ON			
567-03			CMD	MPS	MPS L02 ACC RECIRC VLV 2 CL CMDB	V41K1826XL	ON			
567-06	ST378		VFY	MPS	ET/ORB 4 IN DISCON PD 3 CLOSED IND	V41X1420E1	OFF			
567-07		K	CMD	MPS	PD3 CTL OVERRIDE	NLHK0040X	ON			
567-08		K	CMD	MPS	GCH60 SHUTOFF	NLHK0062X	ON			
567-09		K	CMD	MPS	PV13 CTL OVERRIDE	NLHK0038X	ON			
567-10		K	CMD	MPS	GCH58 SHUTOFF	NLHK0060X	ON			
567-11		V	CMD	MPS	PD3 CTL OVERRIDE	NLHX115E	ON			
567-12		V	CMD	MPS	GCH58V SHUTOFF	NLHK0062X	ON			
567-13		V	CMD	MPS	GCH56V SHUTOFF	NLHX118E	ON			
567-14		V	CMD	MPS	PV13 CTL OVERRIDE	NLHK0060X	ON			
567-15		CMD	MPS	MPS	ET/ORB 4 IN DISCON PD3 CLS CMD	V41K1422XL	ON			
567-16		CMD	MPS	MPS	ET/ORB 4 IN DISCON PD3 OPN CMD	V41K1421XL	OFF			
568-03		CMD	MPS	MPS	EXPOSED PRI FIRE DETS OFF CMD	GLHK7490E	OFF			
568-04		CMD	MPS	MPS	EXPOSED SEC FIRE DETS OFF CMD	GLHK750CE	OFF			
571-03		VFY	MPS	MPS	ORB AFT LFT VENT FD 36 ALARM ON	GLHX7453E	OFF			DISPLAY
571-04		VFY	MPS	MPS	ORB AFT LFT VENT FD 37 ALARM ON	GLHX7463E	OFF			DISPLAY
571-05		VFY	MPS	MPS	SSME C/O FD 38 ALARM ON	GLHX7473E	OFF			DISPLAY
571-06		VFY	MPS	MPS	SSME C/O FD 39 ALARM ON	GLHX7483E	OFF			DISPLAY
571-08		CVFY	MPS	MPS	SSME C/O FD 38 ALARM ON	GLHX7473E	OFF			CPER 6014
571-09		CVFY	MPS	MPS	SSME C/O FD 39 ALARM ON	GLHX7483E	OFF			CPER 6014
616-01		VFY	MPS	MPS	ET/ORB R IN DISCON PD3 CLOSED IND	V41X1420E1	ON			DISPLAY
616-02		VFY	MPS	MPS	ME-1 L02 PREVLV CLOSE IND	V41X1135E1	ON			DISPLAY
616-03		VFY	MPS	MPS	ME-1 LH2 PREVLV CLOSE IND	V41X1105E1	ON			DISPLAY

SEQ	TIME	CD	CLCK	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
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616-04	VFY	MPS		ME-2	L02	PREVLV	CLOSE	IND	V41X1235E1	ON	DISPLAY		
616-05	VFY	MPS		ME-2	LH2	PREVLV	CLOSE	IND	V41X1205E1	ON	DISPLAY		
616-06	VFY	MPS		ME-3	L02	PREVLV	CLOSE	IND	V41X1335E1	ON	DISPLAY		
616-07	VFY	MPS		ME-3	LH2	PREVLV	CLOSE	IND	V41X1305E1	ON	DISPLAY		
616-08	VFY	MPS		L02	OVERBOARD	BLEED	VALVE	OPEN	V41X1587E1	ON	OR		
616-09	VFY	MPS		L02	ACC	RECIRC	VLV 1	CLOSED	V41X1818E1	ON	2 OF 2		
616-10	VFY	MPS		L02	ACC	RECIRC	VLV 2	CLOSED	V41X1828E1	ON	DISPLAY		
701-14	VFY	MPS		MPS	LH2	OUTBD	FILL	VLV HOLD	V9CX839CX1	OFF	DISPLAY		
701-15	VFY	MPS		MPS	LOX	OUTBD	FILL	VLV HOLD	V9CX8391X1	OFF	DISPLAY		
701-16	VFY	MPS		MPS	LOX	ACC	RECIRC	VLV HOLD	V90X8392X1	OFF	DISPLAY		
701-17	VFY	MPS		MPS	L02	OVBD	B/V	CLOSE	V90X8399X1	OFF	DISPLAY		
701-18	VFY	MPS		MPS	E1	H2	PREVLV	OPEN	V90X8396X1	OFF	DISPLAY		
701-19	VFY	MPS		MPS	E2	H2	PREVLV	OPEN	V90X8397X1	OFF	DISPLAY		
701-20	VFY	MPS		MPS	E3	H2	PREVLV	OPEN	V9CX8398X1	OFF	DISPLAY		
701-21	VFY	MPS		MPS	VLV	POS	COMM	FAULT	V9CX8769X1	OFF	DISPLAY		
702-01	CMD	MPS		MPS	E-1	LH2	PREVALVE	CLOSE	V41K1122XL	OFF			
702-02	CMD	MPS		MPS	E-1	LH2	PREVALVE	CLOSE	V41K1123XL	OFF			
702-03	CMD	MPS		MPS	E-1	LH2	PREVALVE	CLOSE	V41K1124XL	OFF			
703-01	CMD	MPS		MPS	E-2	LH2	PREVALVE	CLOSE	V41K1222XL	OFF			
703-02	CMD	MPS		MPS	E-2	LH2	PREVALVE	CLOSE	V41K1223XL	OFF			
703-03	CMD	MPS		MPS	E-2	LH2	PREVALVE	CLOSE	V41K1224XL	OFF			
704-01	CMD	MPS		MPS	E-3	LH2	PREVALVE	CLOSE	V41K1322XL	OFF			
704-02	CMD	MPS		MPS	E-3	LH2	PREVALVE	CLOSE	V41K1323XL	OFF			
704-03	CMD	MPS		MPS	E-3	LH2	PREVALVE	CLOSE	V41K1324XL	OFF			
714-10	K	CVFY	MPS	SSME	C/O	FD 38	ALARM	ON	GLHX7473E	OFF	CPER G014		
714-11	K	CVFY	MPS	SSME	C/O	FD 39	ALARM	ON	GLHX7483E	OFF	CPER G014		
006-00	CVFY	NAVA		TACAN	NO 1	POWER	STATUS		V74X0071X1	ON	2 OF 3	6.9.5-2	
006-01	CVFY	NAVA		TACAN	NO 2	POWER	STATUS		V74X0081X1	ON	2 OF 3	6.9.5-2	
006-02	CVFY	NAVA		TACAN	NO 3	POWER	STATUS		V74X0091X1	ON	LCC-1		
805-25	END	P001											
809-06	END	P002											
814-04	END	P003											
893-01	END	P004											
908-00	END	P005											
014-00	K	CVFY	PVD	ORB	FWD	I/F	PRESS		GECP2400A	30	86	INH20	1 OF 2
014-01	K	CVFY	PVD	ORB	PLB	DUCT	PRESS		GECP4401A	35	96	INH20	LCC-3
014-02	K	CVFY	PVD	ORB	PLB	I/F	PRESS		GECP2200A	20	86	INH20	1 OF 2
014-03	K	CVFY	PVD	ORB	PLB	DUCT	PRESS		GECP4201A	24	96	INH20	LCC-3
014-04	K	CVFY	PVD	ORB	AFT	I/F	PRESS		GECP230CA	24	86	INH20	1 OF 2
014-05	K	CVFY	PVD	ORB	AFT	DUCT	PRESS		GECP4301A	31	110	INH20	LCC-3
014-50	V	CVFY	PVD	ECPT603	ORB	FWD	I/F	PRESS	XECPVH09A	1-4	2.7.	PSI	1 OF 2

DATE 12-10-85

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI S90C5 - L

SEQ	TIME	CD	FUNCTION	DISC	NOMENCLATURE	VALUE	ELSE	DURATION	LCC	PAGE
014-51	V	CVFY	PVD		ECPT604 ORB FWD I/F PRESS	1.4	PSI	LCC-3		
014-52	V	CVFY	PVD		ECPT503 ORB PLB I/F PRESS	2.7	PSI	1 OF 2		
014-53	V	CVFY	PVD		ECPT504 ORB PLB I/F PRESS	2.5	PSI	LCC-3		
014-54	V	CVFY	PVD		ECPT605 ORB AFT I/F PRESS	2.7	PSI	1 OF 2		
014-55	V	CVFY	PVD		ECRT606 ORB AFT I/F PRESS	2.7	PSI	LCC-3		
058-00	VEY	PVD			L FWD VENTS 1/2 PURGE IND 1			INHB M009		
058-01	VFY	PVD			L FWD VENTS 1/2 PURGE IND 2			INHB M009		
058-02	VFY	PVD			R FWD VENTS 1/2 PURGE IND 1			INHB M009		
058-03	VFY	PVD			R FWD VENTS 1/2 PURGE IND 2			INHB M009		
058-04	VFY	PVD			L PB VENT 3 CLOSED 1			INHB M009		
058-05	VFY	PVD			L PB VENT 3 CLOSED 2			INHB M009		
058-06	VEY	PVD			R PB VENT 3 CLOSED 1			INHB M009		
058-07	VFY	PVD			R PB VENT 3 CLOSED 2			INHB M009		
058-08	VFY	PVD			L PB VENT 5 CLOSED 1			INHB M009		
058-09	VFY	PVD			L PB VENT 5 CLOSED 2			INHB M009		
058-10	VFY	PVD			R PB VENT 5 CLOSED 1			INHB M009		
058-11	VFY	PVD			R PB VENT 5 CLOSED 2			INHB M009		
058-12	VEY	PVD			L PB/W VENT 4/7 CLOSED 1			INHB M009		
058-13	VFY	PVD			L PB/W VENT 4/7 CLOSED 2			INHB M009		
058-14	VFY	PVD			R PB/W VENT 4/7 CLOSED 1			INHB M009		
058-15	VFY	PVD			R PB/W VENT 4/7 CLOSED 2			INHB M009		
058-16	VFY	PVD			L PB VENT 6 CLOSED IND 1			INHB M009		
058-17	VFY	PVD			L PB VENT 6 CLOSED IND 2			INHB M009		
058-18	VFY	PVD			R PB VENT 6 CLOSED IND 1			INHB M009		
058-19	VFY	PVD			R PB VENT 6 CLOSED IND 2			INHB M009		
058-20	VFY	PVD			L AFT VENTS 8/9 PURGE IND 1			INHB M009		
058-21	VFY	PVD			L AFT VENTS 8/9 PURGE IND 2			INHB M009		
058-22	VFY	PVD			R AFT VENTS 8/9 PURGE IND 1			INHB M009		
058-23	VFY	PVD			R AFT VENTS 8/9 PURGE IND 2			INHB M009		
106-00	K	ICL	PVD		L PB VENT 6 CLOSED 1			INHB M009		
106-01	K	ICL	PVD		L PB VENT 6 CLOSED 2			INHB M009		
106-02	K	ICL	PVD		R PB VENT 6 CLOSED 1			INHB M009		
106-03	K	ICL	PVD		R PB VENT 6 CLOSED 2			INHB M009		
116-00	ACL	PVD			L FWD VENTS 1/2 CLOSED 1			INHB M009		
116-01	ACL	PVD			L FWD VENTS 1/2 CLOSED 2			INHB M009		
116-02	ACL	PVD			L AFT VENTS 8/9 CLOSED 1			INHB M009		
116-03	ACL	PVD			L AFT VENTS 8/9 CLOSED 2			INHB M009		
116-04	ACL	PVD			R FWD VENTS 1/2 CLOSED 1			INHB M009		
116-05	ACL	PVD			R FWD VENTS 1/2 CLOSED 2			INHB M009		
116-06	ACL	PVD			R AFT VENTS 8/9 CLOSED 1			INHB M009		
116-07	ACL	PVD			R AFT VENTS 8/9 CLOSED 2			INHB M009		

SEQ	TIME	CD	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
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116-08	K	ACL	PVD		N COIL INLET PRESS (PRI)IND	GEC2000A					
116-09	K	ACL	PVD		ORB B DUCT FLOW DIFF PRESS INC	GEC2261A					
116-12	K	ACL	PVD		N COIL INLET PRESS (SEC)IND	GEC4000A					
572-00	ST400	VFY	PVD		L AFT VENTS 8/9 OPEN 1	V59X3855X1 ON	3 OF 4				
572-01		VFY	PVD		L AFT VENTS 8/9 OPEN 2	V59X3865X1 ON	DELAY		1 SEC		
572-02		VFY	PVD		R AFT VENTS 8/9 OPEN 1	V59X4855X1 ON	GTO		ST400		
572-03		VFY	PVD		R AFT VENTS 8/9 OPEN 2	V59X4865X1 ON	MAX OF 30 RETRIES				
573-00		CMD	PVD		L PB/W VENTS 4/7 OPEN CMD 1A	V59K3350XL OFF					
573-01		CMD	PVD		L PB/W VENTS 4/7 OPEN CMD 1B	V59K3351XL OFF					
573-02		CMD	PVD		L PB/W VENTS 4/7 OPEN CMD 2A	V59K336CXL OFF					
573-03		CMD	PVD		L PB/W VENTS 4/7 OPEN CMD 2B	V59K3361XL OFF					
573-04		CMD	PVD		R PB/W VENTS 4/7 OPEN CMD 1A	V59K4350XL OFF					
573-05		CMD	PVD		R PB/W VENTS 4/7 OPEN CMD 1B	V59K4351XL OFF					
573-06		CMD	PVD		R PB/W VENTS 4/7 OPEN CMD 2A	V59K4360XL OFF					
573-07		CMD	PVD		R PB/W VENTS 4/7 OPEN CMD 2B	V59K4361XL OFF					
574-00		CMD	PVD		L PB VENT 3 OPEN CMD 1A	V59K325CXL OFF					
574-01		CMD	PVD		L PB VENT 3 OPEN CMD 1B	V59K3251XL OFF					
574-02		CMD	PVD		L PB VENT 3 OPEN CMD 2A	V59K326CXL OFF					
574-03		CMD	PVD		L PB VENT 3 OPEN CMD 2B	V59K3261XL OFF					
574-04		CMD	PVD		R PB VENT 3 OPEN CMD 1A	V59K4250XL OFF					
574-05		CMD	PVD		R PB VENT 3 OPEN CMD 1B	V59K4251XL OFF					
574-06		CMD	PVD		R PB VENT 3 OPEN CMD 2A	V59K4260XL OFF					
574-07		CMD	PVD		R PB VENT 3 OPEN CMD 2B	V59K4261XL OFF					
575-00		CMD	PVD		L PB VENT 6 OPEN CMD 1A	V59K355CXL OFF					PL
575-01		CMD	PVD		L PB VENT 6 OPEN CMD 1B	V59K3551XL OFF					PL
575-02		CMD	PVD		L PB VENT 6 OPEN CMD 2A	V59K3560XL OFF					PL
575-03		CMD	PVD		L PB VENT 6 OPEN CMD 2B	V59K3561XL OFF					PL
575-04		CMD	PVD		R PB VENT 6 OPEN CMD 1A	V59K4550XL OFF					PL
575-05		CMD	PVD		R PB VENT 6 OPEN CMD 1B	V59K4551XL OFF					PL
575-06		CMD	PVD		R PB VENT 6 OPEN CMD 2A	V59K4560XL OFF					PL
575-07		CMD	PVD		R PB VENT 6 OPEN CMD 2B	V59K4561XL OFF					PL
576-00		CMD	PVD		L PB VENT 5 OPEN CMD 1A	V59K3450XL OFF					
576-01		CMD	PVD		L PB VENT 5 OPEN CMD 1B	V59K3451XL OFF					
576-02		CMD	PVD		L PB VENT 5 OPEN CMD 2A	V59K3460XL OFF					
576-03		CMD	PVD		L PB VENT 5 OPEN CMD 2B	V59K3461XL OFF					
576-04		CMD	PVD		R PB VENT 5 OPEN CMD 1A	V59K4450XL OFF					
576-05		CMD	PVD		R PB VENT 5 OPEN CMD 1B	V59K4451XL OFF					
576-06		CMD	PVD		R PB VENT 5 OPEN CMD 2A	V59K4460XL OFF					
576-07		CMD	PVD		R PB VENT 5 OPEN CMD 2B	V59K4461XL OFF					
577-00		CMD	PVD		L FWD VENTS 1/2 OPEN CMD 1A	V59K3050XL OFF					
577-01		CMD	PVD		L FWD VENTS 1/2 OPEN CMD 1B	V59K3051XL OFF					

SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	FACE	S
:	CD	:	:	:	DESIGNATOR	SINGL	:	:	:	:	:
:	CLOCK	:	:	:	:	FOR	LO	HIGH	:	:	UNIT
:	:	:	:	:	:	:	:	:	:	:	:
577-02	CMD	PVD	L	FWD VENTS 1/2 OPEN CMD 2A	V59K306CXL	OFF					
577-03	CMD	PVD	L	FWD VENTS 1/2 OPEN CMD 2B	V59K3061XL	OFF					
577-04	CMD	PVD	R	FWD VENTS 1/2 OPEN CMD 1A	V59K4050XL	OFF					
577-05	CMD	PVD	R	FWD VENTS 1/2 OPEN CMD 1B	V59K4051XL	OFF					
577-06	CMD	PVD	R	FWD VENTS 1/2 OPEN CMD 2A	V59K4060XL	OFF					
577-07	CMD	PVD	R	FWD VENTS 1/2 OPEN CMD 2B	V59K4061XL	OFF					
578-00	CMD	PVD	L	AFT VENTS 8/9 OPEN CMD 1A	V59K385CXL	OFF					
578-01	CMD	PVD	L	AFT VENTS 8/9 OPEN CMD 1B	V59K3851XL	OFF					
578-02	CMD	PVD	L	AFT VENTS 8/9 OPEN CMD 2A	V59K3860XL	OFF					
578-03	CMD	PVD	L	AFT VENTS 8/9 OPEN CMD 2B	V59K3861XL	OFF					
578-04	CMD	PVD	R	AFT VENTS 8/9 OPEN CMD 1A	V59K4850XL	OFF					
578-05	CMD	PVD	R	AFT VENTS 8/9 OPEN CMD 1B	V59K4851XL	OFF					
578-06	CMD	PVD	R	AFT VENTS 8/9 OPEN CMD 2A	V59K486CXL	OFF					
578-07	CMD	PVD	R	AFT VENTS 8/9 OPEN CMD 2B	V59K4861XL	OFF					
579-00	VFY	PVD	L	PB/W VENT 4/7 CLOSED 1	V59X3305X1	OFF					1 OF 4
579-01	VFY	PVD	L	PB/W VENT 4/7 CLOSED 2	V59X3315X1	OFF					1 OF 4
579-02	VFY	PVD	R	PB/W VENT 4/7 CLOSED 1	V59X4305X1	OFF					1 OF 4
579-03	VFY	PVD	R	PB/W VENT 4/7 CLOSED 2	V59X4315X1	OFF					SKIP SEQ
580-00	CMD	PVD	L	PB/W VENTS 4/7 CLOSE CMD 1A	V59K330CXL	ON					
580-01	CMD	PVD	L	PB/W VENTS 4/7 CLOSE CMD 1B	V59K3301XL	ON					
580-02	CMD	PVD	L	PB/W VENTS 4/7 CLOSE CMD 2A	V59K3310XL	ON					
580-03	CMD	PVD	L	PB/W VENTS 4/7 CLOSE CMD 2B	V59K3311XL	ON					
580-04	CMD	PVD	R	PB/W VENTS 4/7 CLOSE CMD 1A	V59K4300XL	ON					
580-05	CMD	PVD	R	PB/W VENTS 4/7 CLOSE CMD 1B	V59K4301XL	ON					
580-06	CMD	PVD	R	PB/W VENTS 4/7 CLOSE CMD 2A	V59K431CXL	ON					
580-07	CMD	PVD	R	PB/W VENTS 4/7 CLOSE CMD 2B	V59K4311XL	ON					
581-00	VFY	PVD	L	PB VENT 3 CLOSED 1	V59X3205X1	OFF					1 OF 4
581-01	VFY	PVD	L	PB VENT 3 CLOSED 2	V59X3215X1	OFF					1 OF 4
581-02	VFY	PVD	R	PB VENT 3 CLOSED 1	V59X4205X1	OFF					1 OF 4
581-03	VFY	PVD	R	PB VENT 3 CLOSED 2	V59X4215X1	OFF					SKIP SEQ
582-00	CMD	PVD	L	PB VENTS 3 CLOSE CMD 1A	V59K320CXL	ON					
582-01	CMD	PVD	L	PB VENTS 3 CLOSE CMD 1B	V59K3201XL	ON					
582-02	CMD	PVD	L	PB VENTS 3 CLOSE CMD 2A	V59K321CXL	ON					
582-03	CMD	PVD	L	PB VENTS 3 CLOSE CMD 2B	V59K3211XL	ON					
582-04	CMD	PVD	R	PB VENTS 3 CLOSE CMD 1A	V59K4200XL	ON					
582-05	CMD	PVD	R	PB VENTS 3 CLOSE CMD 1B	V59K4201XL	ON					
582-06	CMD	PVD	R	PB VENTS 3 CLOSE CMD 2A	V59K421CXL	ON					
582-07	CMD	PVD	R	PB VENTS 3 CLOSE CMD 2B	V59K4211XL	ON					
584-00	VFY	PVD	L	PB VENT 6 CLOSED 1	V59X3505X1	OFF					1 OF 4
584-01	VFY	PVD	L	PB VENT 6 CLOSED 2	V59X3515X1	OFF					1 OF 4
584-02	VFY	PVD	R	PB VENT 6 CLOSED 1	V59X4505X1	OFF					1 OF 4

DATE	12-10-85	GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33												OMI	S90C5	-	L	
SEQ	:	S :	I :	FUNC :	DISC :	NOMENCLATURE	:	VALUE	:	ELSE	:	DURATION :	:	LCC	:	:	:	
CLOCK	:	:	CD :	:	:	:	:	:	:	:	:	:	:	:	PAGE	:	:	:
	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
584-03	:	VFY	:	PVD	:	R PB VENT 6 CLOSED 2	:	V5X4515X1 OFF	:		:	GTO ST 410	:		:	PL	:	
584-04	:	CMD	:	PVD	:	L PB VENT 6 CLOSE CMD 1A	:	V59K350CXL ON	:		:		:		:	PL	:	
584-05	:	CMD	:	PVD	:	L PB VENT 6 CLOSE CMD 1B	:	V59K3501XL ON	:		:		:		:	PL	:	
584-06	:	CMD	:	PVD	:	L PB VENT 6 CLOSE CMD 2A	:	V59K3510XL ON	:		:		:		:	PL	:	
584-07	:	CMD	:	PVD	:	L PB VENT 6 CLOSE CMD 2B	:	V59K3511XL ON	:		:		:		:	PL	:	
584-08	:	CMD	:	PVD	:	R PB VENT 6 CLOSE CMD 1A	:	V59K4500XL ON	:		:		:		:	PL	:	
584-09	:	CMD	:	PVD	:	R PB VENT 6 CLOSE CMD 1B	:	V59K4501XL ON	:		:		:		:	PL	:	
584-10	:	CMD	:	PVD	:	R PB VENT 6 CLOSE CMD 2A	:	V59K451CXL ON	:		:		:		:	PL	:	
584-11	:	CMD	:	PVD	:	R PB VENT 6 CLOSE CMD 2B	:	V59K4511XL ON	:		:		:		:	PL	:	
585-00	:	CMD	:	PVD	:	L PB VENT 5 CLOSE CMD 1A	:	V59K3400XL ON	:		:		:		:	PL	:	
585-01	:	CMD	:	PVD	:	L PB VENT 5 CLOSE CMD 1B	:	V59K3401XL ON	:		:		:		:	PL	:	
585-02	:	CMD	:	PVD	:	L PB VENT 5 CLOSE CMD 2A	:	V59K3410XL ON	:		:		:		:	PL	:	
585-03	:	CMD	:	PVD	:	L PB VENT 5 CLOSE CMD 2B	:	V59K3411XL ON	:		:		:		:	PL	:	
585-04	:	CMD	:	PVD	:	R PB VENT 5 CLOSE CMD 1A	:	V59K4400XL ON	:		:		:		:	PL	:	
585-05	:	CMD	:	PVD	:	R PB VENT 5 CLOSE CMD 1B	:	V59K4401XL ON	:		:		:		:	PL	:	
585-06	:	CMD	:	PVD	:	R PB VENT 5 CLOSE CMD 2A	:	V59K4410XL ON	:		:		:		:	PL	:	
585-07	:	CMD	:	PVD	:	R PB VENT 5 CLOSE CMD 2B	:	V59K4411XL ON	:		:		:		:	PL	:	
586-00	:	CMD	:	PVD	:	L FWD VENTS 1/2 PURGE CMD 1A	:	V59K3100XL ON	:		:		:		:	PL	:	
586-01	:	CMD	:	PVD	:	L FWD VENTS 1/2 PURGE CMD 1B	:	V59K3101XL ON	:		:		:		:	PL	:	
586-02	:	CMD	:	PVD	:	L FWD VENTS 1/2 PURGE CMD 2A	:	V59K3110XL ON	:		:		:		:	PL	:	
586-03	:	CMD	:	PVD	:	L FWD VENTS 1/2 PURGE CMD 2B	:	V59K3111XL ON	:		:		:		:	PL	:	
586-04	:	CMD	:	PVD	:	R FWD VENTS 1/2 PURGE CMD 1A	:	V59K4100XL ON	:		:		:		:	PL	:	
586-05	:	CMD	:	PVD	:	R FWD VENTS 1/2 PURGE CMD 1B	:	V59K4101XL ON	:		:		:		:	PL	:	
586-06	:	CMD	:	PVD	:	R FWD VENTS 1/2 PURGE CMD 2A	:	V59K4110XL ON	:		:		:		:	PL	:	
586-07	:	CMD	:	PVD	:	R FWD VENTS 1/2 PURGE CMD 2B	:	V59K4111XL ON	:		:		:		:	PL	:	
587-00	:	CMD	:	PVD	:	L AFT VENTS 8/9 PURGE CMD 1A	:	V59K390CXL ON	:		:		:		:	PL	:	
587-01	:	CMD	:	PVD	:	L AFT VENTS 8/9 PURGE CMD 1B	:	V59K3901XL ON	:		:		:		:	PL	:	
587-02	:	CMD	:	PVD	:	L AFT VENTS 8/9 PURGE CMD 2A	:	V59K391CXL ON	:		:		:		:	PL	:	
587-03	:	CMD	:	PVD	:	L AFT VENTS 8/9 PURGE CMD 2B	:	V59K3911XL ON	:		:		:		:	PL	:	
587-04	:	CMD	:	PVD	:	R AFT VENTS 8/9 PURGE CMD 1A	:	V59K4900XL ON	:		:		:		:	PL	:	
587-05	:	CMD	:	PVD	:	R AFT VENTS 8/9 PURGE CMD 1B	:	V59K4901XL ON	:		:		:		:	PL	:	
587-06	:	CMD	:	PVD	:	R AFT VENTS 8/9 PURGE CMD 2A	:	V59K4910XL ON	:		:		:		:	PL	:	
587-07	:	CMD	:	PVD	:	R AFT VENTS 8/9 PURGE CMD 2B	:	V59K4911XL ON	:		:		:		:	PL	:	
592-00	:	CMD	:	PVD	:	L PB/W VENTS 4/7 CLOSE CMD 1A	:	V59K330CXL OFF	:		:		:		:	PL	:	
592-01	:	CMD	:	PVD	:	L PB/W VENTS 4/7 CLOSE CMD 1B	:	V59K3301XL OFF	:		:		:		:	PL	:	
592-02	:	CMD	:	PVD	:	L PB/W VENTS 4/7 CLOSE CMD 2A	:	V59K3310XL OFF	:		:		:		:	PL	:	
592-03	:	CMD	:	PVD	:	L PB/W VENTS 4/7 CLOSE CMD 2B	:	V59K3311XL OFF	:		:		:		:	PL	:	
592-04	:	CMD	:	PVD	:	R PB/W VENTS 4/7 CLOSE CMD 1A	:	V59K4300XL OFF	:		:		:		:	PL	:	
592-05	:	CMD	:	PVD	:	R PB/W VENTS 4/7 CLOSE CMD 1B	:	V59K4301XL OFF	:		:		:		:	PL	:	
592-06	:	CMD	:	PVD	:	R PB/W VENTS 4/7 CLOSE CMD 2A	:	V59K4310XL OFF	:		:		:		:	PL	:	
592-07	:	CMD	:	PVD	:	R PB/W VENTS 4/7 CLOSE CMD 2B	:	V59K4311XL OFF	:		:		:		:	PL	:	







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GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI S90C5 - L

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
:	CD	:	:	:	:	DESIGNATOR	:	:	:	:	:
:	CLOCK	E	:	:	:	OR LO	HIGH	UNIT	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:

593-00	CMD	PVD	L	PB	VENTS 3	CLOSE	CMD 1A			V59K3200XL	OFF	PL
593-01	CMD	PVD	L	PB	VENTS 3	CLOSE	CMD 1B			V59K3201XL	OFF	PL
593-02	CMD	PVD	L	PB	VENTS 3	CLOSE	CMD 2A			V59K3210XL	OFF	PL
593-03	CMD	PVD	L	PB	VENTS 3	CLOSE	CMD 2B			V59K3211XL	OFF	PL
593-04	CMD	PVD	R	PB	VENTS 3	CLOSE	CMD 1A			V59K4200XL	OFF	PL
593-05	CMD	PVD	R	PB	VENTS 3	CLOSE	CMD 1B			V59K4201XL	OFF	PL
593-06	CMD	PVD	R	PB	VENTS 3	CLOSE	CMD 2A			V59K4210XL	OFF	PL
593-07	CMD	PVD	R	PB	VENTS 3	CLOSE	CMD 2B			V59K4211XL	OFF	PL
594-09	CMD	PVD	L	PB	VENT 6	CLOSE	CMD 1A			V59K3500XL	OFF	PL
594-10	CMD	PVD	L	PB	VENT 6	CLOSE	CMD 1B			V59K3501XL	OFF	PL
594-11	CMD	PVD	L	PB	VENT 6	CLOSE	CMD 2A			V59K3510XL	OFF	PL
594-12	CMD	PVD	L	PB	VENT 6	CLOSE	CMD 2B			V59K3511XL	OFF	PL
594-13	CMD	PVD	R	PB	VENT 6	CLOSE	CMD 1A			V59K450CXL	OFF	PL
594-14	CMD	PVD	R	PB	VENT 6	CLOSE	CMD 1B			V59K4501XL	OFF	PL
594-15	CMD	PVD	R	PB	VENT 6	CLOSE	CMD 2A			V59K4510XL	OFF	PL
594-16	CMD	PVD	R	PB	VENT 6	CLOSE	CMD 2B			V59K4511XL	OFF	PL
595-00	CMD	PVD	L	PB	VENT 5	CLOSE	CMD 1A			V59K340CXL	OFF	PL
595-01	CMD	PVD	L	PB	VENT 5	CLOSE	CMD 1B			V59K3401XL	OFF	PL
595-02	CMD	PVD	L	PB	VENT 5	CLOSE	CMD 2A			V59K3410XL	OFF	PL
595-03	CMD	PVD	L	PB	VENT 5	CLOSE	CMD 2B			V59K3411XL	OFF	PL
595-04	CMD	PVD	R	PB	VENT 5	CLOSE	CMD 1A			V59K440CXL	OFF	PL
595-05	CMD	PVD	R	PB	VENT 5	CLOSE	CMD 1B			V59K4401XL	OFF	PL
595-06	CMD	PVD	R	PB	VENT 5	CLOSE	CMD 2A			V59K4410XL	OFF	PL
595-07	CMD	PVD	R	PB	VENT 5	CLOSE	CMD 2B			V59K4411XL	OFF	PL
596-00	CMD	PVD	L	FWD	VENTS 1/2	PURGE	CMD 1A			V59K3100XL	OFF	PL
596-01	CMD	PVD	L	FWD	VENTS 1/2	PURGE	CMD 1B			V59K3101XL	OFF	PL
596-02	CMD	PVD	L	FWD	VENTS 1/2	PURGE	CMD 2A			V59K3110XL	OFF	PL
596-03	CMD	PVD	L	FWD	VENTS 1/2	PURGE	CMD 2B			V59K3111XL	OFF	PL
596-04	CMD	PVD	R	FWD	VENTS 1/2	PURGE	CMD 1A			V59K410CXL	OFF	PL
596-05	CMD	PVD	R	FWD	VENTS 1/2	PURGE	CMD 1B			V59K4101XL	OFF	PL
596-06	CMD	PVD	R	FWD	VENTS 1/2	PURGE	CMD 2A			V59K4110XL	OFF	PL
596-07	CMD	PVD	R	FWD	VENTS 1/2	PURGE	CMD 2B			V59K4111XL	OFF	PL
597-00	CMD	PVD	L	AFT	VENTS 8/9	PURGE	CMD 1A			V59K3900XL	OFF	PL
597-01	CMD	PVD	L	AFT	VENTS 8/9	PURGE	CMD 1B			V59K3901XL	OFF	PL
597-02	CMD	PVD	L	AFT	VENTS 8/9	PURGE	CMD 2A			V59K3910XL	OFF	PL
597-03	CMD	PVD	L	AFT	VENTS 8/9	PURGE	CMD 2B			V59K3911XL	OFF	PL
597-04	CMD	PVD	R	AFT	VENTS 8/9	PURGE	CMD 1A			V59K4900XL	OFF	PL
597-05	CMD	PVD	R	AFT	VENTS 8/9	PURGE	CMD 1B			V59K4901XL	OFF	PL
597-06	CMD	PVD	R	AFT	VENTS 8/9	PURGE	CMD 2A			V59K4910XL	OFF	PL
597-07	CMD	PVD	R	AFT	VENTS 8/9	PURGE	CMD 2B			V59K4911XL	OFF	PL
607-00	VFY	PVD	L	FWD	VENTS 1/2	PURGE	IND 1			V59X3105X1	ON	PL

DISPLAY

DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33 : OMI 90C15 - L

SEQ	TIME	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
CD	ST								PAGE
CLOCK	E				OR LO:HIGH	UNIT			F
									D
607-01	VFY	PVD	L	FWD VENTS 1/2 PURGE IND 2	V59X3115X1	ON	DISPLAY		
607-02	VFY	PVD	R	FWD VENTS 1/2 PURGE IND 1	V59X4105X1	ON	DISPLAY		
607-03	VFY	PVD	R	FWD VENTS 1/2 PURGE IND 2	V59X4115X1	ON	DISPLAY		
608-00	VFY	PVD	L	PB VENT 3 CLOSED 1	V59X3205X1	ON	DISPLAY		
608-01	VFY	PVD	L	PB VENT 3 CLOSED 2	V59X3215X1	ON	DISPLAY		
608-02	VFY	PVD	R	PB VENT 3 CLOSED 1	V59X4205X1	ON	DISPLAY		
608-03	VFY	PVD	R	PB VENT 3 CLOSED 2	V59X4215X1	ON	DISPLAY		
609-00	VFY	PVD	L	PB VENT 5 CLOSED 1	V59X3405X1	ON	DISPLAY		
609-01	VFY	PVD	L	PB VENT 5 CLOSED 2	V59X3415X1	ON	DISPLAY		
609-02	VFY	PVD	R	PB VENT 5 CLOSED 1	V59X4405X1	ON	DISPLAY		
609-03	VFY	PVD	R	PB VENT 5 CLOSED 2	V59X4415X1	ON	DISPLAY		
610-00	VFY	PVD	L	PB/W VENT 4/7 CLOSED 1	V59X3305X1	ON	DISPLAY		
610-01	VFY	PVD	L	PB/W VENT 4/7 CLOSED 2	V59X3315X1	ON	DISPLAY		
610-02	VFY	PVD	R	PB/W VENT 4/7 CLOSED 1	V59X4305X1	ON	DISPLAY		
610-03	VFY	PVD	R	PB/W VENT 4/7 CLOSED 2	V59X4315X1	ON	DISPLAY		
611-00	VFY	PVD	L	PB VENT 6 CLOSED 1	V59X3505X1	ON	DISPLAY		
611-01	VFY	PVD	L	PB VENT 6 CLOSED 2	V59X3515X1	ON	DISPLAY		
611-02	VFY	PVD	R	PB VENT 6 CLOSED 1	V59X4505X1	ON	DISPLAY		
611-03	VFY	PVD	R	PB VENT 6 CLOSED 2	V59X4515X1	ON	DISPLAY		
612-00	VFY	PVD	L	AFT VENTS 8/9 PURGE IND 1	V59X3905X1	ON	DISPLAY		
612-01	VFY	PVD	L	AFT VENTS 8/9 PURGE IND 2	V59X3915X1	ON	DISPLAY		
612-02	VFY	PVD	R	AFT VENTS 8/9 PURGE IND 1	V59X4905X1	ON	DISPLAY		
612-03	VFY	PVD	R	AFT VENTS 8/9 PURGE IND 2	V59X4915X1	ON	DISPLAY		
007-00	CVFY	SSME	ME-1	OPOV LOX SUPPLY LINE TEMP#1	E41T1151A1	-160	NOHI	DEGF	6.2.2-17
007-01	CVFY	SSME	ME-1	OPOV LOX SUPPLY LINE TEMP#2	E41T1152A1	-160	NOHI	DEGF	6.2.2-17
007-02	CVFY	SSME	ME-2	OPOV LOX SUPPLY LINE TEMP#1	E41T2151A1	-160	NOHI	DEGF	6.2.2-17
007-03	CVFY	SSME	ME-2	OPOV LOX SUPPLY LINE TEMP#2	E41T2152A1	-160	NOHI	DEGF	6.2.2-17
007-04	CVFY	SSME	ME-3	OPOV LOX SUPPLY LINE TEMP#1	E41T3151A1	-160	NOHI	DEGF	6.2.2-17
007-05	CVFY	SSME	ME-3	OPOV LOX SUPPLY LINE TEMP#2	E41T3152A1	-160	NOHI	DEGF	6.2.2-17
007-06	CVFY	SSME	ME-1	MFV N01 DNSTREAM SKIN TEMP	E41T1153A1	-250	NOHI	DEGF	6.2.2-18
007-07	CVFY	SSME	ME-1	MFV N02 DNSTREAM SKIN TEMP	E41T1154A1	-250	NOHI	DEGF	6.2.2-18
007-08	CVFY	SSME	ME-2	MFV N01 DNSTREAM SKIN TEMP	E41T2153A1	-250	NOHI	DEGF	6.2.2-18
007-09	CVFY	SSME	ME-2	MFV N02 DNSTREAM SKIN TEMP	E41T2154A1	-250	NOHI	DEGF	6.2.2-18
007-10	CVFY	SSME	ME-3	MFV N01 DNSTREAM SKIN TEMP	E41T3153A1	-250	NOHI	DEGF	6.2.2-18
007-11	CVFY	SSME	ME-3	MFV N02 DNSTREAM SKIN TEMP	E41T3154A1	-250	NOHI	DEGF	6.2.2-18
034-00	CVFY	SSME	ME-1	OPERATING MODE	E41J1513B1	B011	INHB	MPS4	
034-01	CVFY	SSME	ME-2	OPERATING MODE	E41J2513B1	B011	INHB	MPS4	
034-02	CVFY	SSME	ME-3	OPERATING MODE	E41J3513B1	B011	INHB	MPS4	
034-03	CVFY	SSME	ME-1	HPFT DISCH TEMP (CHA)	E41T1010B1	360	NOHI	DEGR	6.2.2-19
034-04	CVFY	SSME	ME-1	HPFT DISCH TEMP (CHB)	E41T1011B1	360	NOHI	DEGR	6.2.2-19
034-05	CVFY	SSME	ME-2	HPFT DISCH TEMP (CHA)	E41T2010B1	360	NOHI	DEGR	6.2.2-19

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	INHB	PSEQ
:	CD	:	:	:	:	DESIGNATOR	:	:	:	1 OF 2	LCC
:	CLOCK	:	:	:	:	SINGL	:	:	:	INHB	PAGE
:	:	:	:	:	:	:	OR LO	HIGH	UNIT	:	:

034-06			CVFY	SSME	ME-2	HPFT DISCH TEMP (CHB)	E41T2011B1	360	NOHI	DEGR	INHB	PSEQ
034-07			CVFY	SSME	ME-3	HPFT DISCH TEMP (CHA)	E41T3010B1	360	NOHI	DEGR	1 OF 2	6.2.2-19
034-08			CVFY	SSME	ME-3	HPFT DISCH TEMP (CHB)	E41T3011B1	360	NOHI	DEGR		6.2.2-19
115-00			ACL	SSME	MPENG	GN2 PRG OUT PRESS	GGNP1034A				INHB	MSEQ
115-01			ACL	SSME	MPENG	GN2 PRG OUT PRESS(R)	GGNP1139A					
155-00			CMD	SSME	ME-1	MFV HEATER PWR ON CMD	GGNK102CE	OFF				
155-01			CMD	SSME	ME-1	MFV HEATER PWR ON (R) CMD	GGNK111CE	OFF				
155-02			CMD	SSME	ME-1	MFV HEATER PWR OFF CMD	GGNK1021E	ON				
155-03			CMD	SSME	ME-1	MFV HEATER PWR OFF (R) CMD	GGNK1141E	ON				
155-04			CMD	SSME	ME-2	MFV HEATER PWR ON CMD	GGNK1040E	OFF				
155-05			CMD	SSME	ME-2	MFV HEATER PWR ON (R) CMD	GGNK1150E	OFF				
155-06			CMD	SSME	ME-2	MFV HEATER PWR OFF CMD	GGNK1041E	ON				
155-07			CMD	SSME	ME-2	MFV HEATER PWR OFF (R) CMD	GGNK1151E	ON				
155-08			CMD	SSME	ME-3	MFV HEATER PWR ON CMD	GGNK1060E	OFF				
155-09			CMD	SSME	ME-3	MFV HEATER PWR ON (R) CMD	GGNK1170E	OFF				
155-10			CMD	SSME	ME-3	MFV HEATER PWR OFF CMD	GGNK1061E	ON				
155-11			CMD	SSME	ME-3	MFV HEATER PWR OFF (R) CMD	GGNK1161E	ON				
160-00			VFY	SSME	ME-1	HYDRAULIC PRESSURE	E41P1054B1	2700	NOHI	PSIA	INHB	MPS4
160-01			VFY	SSME	ME-2	HYDRAULIC PRESSURE	E41P2054B1	2700	NOHI	PSIA	INHB	MPS4
160-02			VFY	SSME	ME-3	HYDRAULIC PRESSURE	E41P3054B1	2700	NOHI	PSIA	INHB	MPS4
165-00			ISSU	SSME	ME-1	PURGE SEQ NO. 4 (ISSUE FD)	E41K1216B1	ON				6.2.2-15
165-01			ISSU	SSME	ME-2	PURGE SEQ NO. 4 (ISSUE FD)	E41K216B1	ON				6.2.2-15
165-02			ISSU	SSME	ME-3	PURGE SEQ NO. 4 (ISSUE FD)	E41K3216B1	ON				6.2.2-15
168-00			CVFY	SSME	ME-1	OPERATING MODE	E41J1513B1	B100			INHB	MSEQ TIL MLH2
168-01			CVFY	SSME	ME-2	OPERATING MODE	E41J2513B1	B100			INHB	MSEQ TIL MLH2
168-02			CVFY	SSME	ME-3	OPERATING MODE	E41J3513B1	B100			INHB	MSEQ TIL MLH2
168-03			CVFY	SSME	ME-1	PHASE IN EFFECT	E41J1512B1	B010			INHB	MSEQ
168-04			CVFY	SSME	ME-2	PHASE IN EFFECT	E41J2512B1	B010			INHB	MSEQ
168-05			CVFY	SSME	ME-3	PHASE IN EFFECT	E41J3512B1	B010			INHB	MSEQ
200-00			CMD	SSME	MPENG	GN2 PRG CNT VLV CLD CMD	GGNK1030E	ON			INHB	MSEQ
200-01			CMD	SSME	MPENG	GN2 PRG CNT VLV CLD CMD (R)	GGNK113CE	ON				
200-02			CMD	SSME	MPENG	GN2 PRG CNT VLV CLD CMD OV	GGNK1037E	OFF				
200-03			CMD	SSME	MPENG	GN2 PRG CNT CLD CMD OVR (R)	GGNK1137E	OFF				
200-04			CMD	SSME	MPENG	GN2 PRG VNT OPN CMD	GGNK1050E	ON				
200-05			CMD	SSME	MPENG	GN2 PRG VNT OPN CMD	GGNK1140E	ON				
200-06			CMD	SSME	MPENG	GN2 PRG VNT OPN CMD OVR	GGNK1057E	OFF				
200-07			CMD	SSME	MPENG	GN2 PRG VNT OPN CMD OVR (R)	GGNK1147E	OFF				
240-00			CVFY	SSME	ME-1	OPERATING MODE	E41J1513B1	B110			INHB	MSEQ
240-01			CVFY	SSME	ME-2	OPERATING MODE	E41J2513B1	B110			INHB	MSEQ
240-02			CVFY	SSME	ME-3	OPERATING MODE	E41J3513B1	B110			INHB	MSEQ
527-00			CMD	SSME	MPENG	GN2 PRG VNT OPN CMD	GGNK1050E	OFF				

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

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SEQ	TIME	CD	CLOCK	I	FUNC	DISC	NOMENCLATURE	SINGL	OR	LO	HIGH	UNIT	VALUE	ELSE	DURATION	LCC	PAGE
527-01				CMD	SSME	MPENG GN2	PRG VNT OPN CMD						GGNK114CE			OFF	
527-02				CMD	SSME	MPENG GN2	PRG VNT OPN CMD	OVR					GGNK1057E			ON	
527-03				CMD	SSME	MPENG GN2	PRG VNT OPN CMD	OVR (R)					GGNK1147E			ON	
527-04				CMD	SSME	MPENG GN2	PRG CNT CLD CMD						GGNK1030E			OFF	
527-05				CMD	SSME	MPENG GN2	PRG CNT VLV CLD CMD (R)						GGNK1130E			OFF	
527-06				CMD	SSME	MPENG GN2	PRG CNT VLV CLD CMD OV						GGNK1037E			ON	
527-07				CMD	SSME	MPENG GN2	PRG CNT CLD CMD OVR (R)						GGNK1137E			ON	
528-00				VFY	SSME	ME-1 PHASE	IN EFFECT						E41J151281	GT0	ST320		
528-01				VFY	SSME	ME-1 OPERATING	MODE						E41J151381	GT0	ST315		
528-02	ST315			ISSU	SSME	ME-1 RESUME	COMMAND						E41K12028L			ON	
528-03				ISSU	SSME	ME-1 LIMIT	CONTROL ENABLE						E41K12118L			ON	
528-04				ISSU	SSME	ME-1 RESUME	COMMAND						E41K12028L			ON	
528-05				ISSU	SSME	ME-1 PURGE	SEQUENCE 3 CMD						E41K12158L			ON	
528-06	ST320			VFY	SSME	ME-2 PHASE	IN EFFECT						E41J251281	GT0	ST325		
528-07				VFY	SSME	ME-2 OPERATING	MODE						E41J251381	GT0	ST321		
528-08	ST321			ISSU	SSME	ME-2 RESUME	COMMAND						E41K22028L			ON	
528-09				ISSU	SSME	ME-2 LIMIT	CONTROL ENABLE						E41K22118L			ON	
528-10				ISSU	SSME	ME-2 RESUME	COMMAND						E41K22028L			ON	
528-11				ISSU	SSME	ME-2 PURGE	SEQUENCE 3 CMD						E41K22158L			ON	
528-12	ST325			VFY	SSME	ME-3 PHASE	IN EFFECT						E41J351281	GT0	ST330		
528-13				VFY	SSME	ME-3 OPERATING	MODE						E41J351381	GT0	ST326		
528-14	ST326			ISSU	SSME	ME-3 RESUME	COMMAND						E41K32028L			ON	
528-15				ISSU	SSME	ME-3 LIMIT	CONTROL ENABLE						E41K32118L			ON	
528-16				ISSU	SSME	ME-3 RESUME	COMMAND						E41K32028L			ON	
528-17				ISSU	SSME	ME-3 PURGE	SEQUENCE 3 CMD						E41K32158L			ON	
529-00				CMD	SSME	ME-1 MFV	HEATER PWR ON	CMD					GGNK1020E			ON	
529-02				CMD	SSME	ME-1 MFV	HEATER PWR OFF	CMD					GGNK1021E			OFF	
529-03				CMD	SSME	ME-1 MFV	HEATER PWR OFF (R) CMD						GGNK1141E			OFF	
529-04				CMD	SSME	ME-2 MFV	HEATER PWR ON	CMD					GGNK1040E			ON	
529-06				CMD	SSME	ME-2 MFV	HEATER PWR OFF	CMD					GGNK1041E			OFF	
529-07				CMD	SSME	ME-2 MFV	HEATER PWR OFF (R) CMD						GGNK1151E			OFF	
529-08				CMD	SSME	ME-3 MFV	HEATER PWR ON	CMD					GGNK106CE			ON	
529-10				CMD	SSME	ME-3 MFV	HEATER PWR OFF	CMD					GGNK1061E			OFF	
529-11				CMD	SSME	ME-3 MFV	HEATER PWR OFF (R) CMD						GGNK1161E			OFF	
552-00				VFY	SSME	ME-1 PHASE	IN EFFECT						E41J151281	GT0	ST353		
552-01				VFY	SSME	ME-1 OPERATING	MODE						E41J151381	GT0	ST351		
552-02	ST351			ISSU	SSME	ME-1 RESUME	CMD						E41K12028L			ON	
552-03				ISSU	SSME	ME-1 LIMIT	CONTROL ENABLE	CMD					E41K12118L			ON	
552-04				ISSU	SSME	ME-1 RESUME	CMD						E41K12028L			ON	
552-05				ISSU	SSME	ME-1 PURGE	SEQUENCE 3 CMD						E41K12158L			ON	
553-00	ST353			VFY	SSME	ME-2 PHASE	IN EFFECT						E41J251281	GT0	ST356		

DATE 12-10-85

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD SIS 33

OMI S90C5 - L

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
	CD	T				DESIGNATOR	SINGL			PAGE
	CLOCK	E					OR LO:HIGH	UNIT		:F
										:D

553-01			VFY	SSME	ME-2 OPERATING MODE		E41J251381 B011			GTO ST354
553-02	ST354		ISSU	SSME	ME-2 RESUME CMD		E41K2202BL ON			
553-03			ISSU	SSME	ME-2 LIMIT CONTROL ENABLE CMD		E41K2211BL ON			
553-04			ISSU	SSME	ME-2 RESUME CMD		E41K2202BL ON			
553-05			ISSU	SSME	ME-2 PURGE SEQUENCE 3 CMD		E41K2215BL ON			
554-00	ST356		VFY	SSME	ME-3 PHASE IN EFFECT		E41J351281 B010			GTO ST359
554-01			VFY	SSME	ME-3 OPERATING MODE		E41J351381 B011			GTO ST357
554-02	ST357		ISSU	SSME	ME-3 RESUME CMD		E41K3202BL ON			
554-03			ISSU	SSME	ME-3 LIMIT CONTROL ENABLE CMD		E41K3211BL ON			
554-04			ISSU	SSME	ME-3 RESUME CMD		E41K3202BL ON			
554-05			ISSU	SSME	ME-3 PURGE SEQUENCE 3 CMD		E41K3215BL ON			
555-01			VFY	SSME	ME-1 OPERATING MODE		E41J151381 B011			GTO ST361
555-03	ST360		VFY	SSME	ME-1 PHASE IN EFFECT		E41J151281 B110			GTO ST361
556-01			VFY	SSME	ME-2 OPERATING MODE		E41J251381 B011			GTO ST363
556-03	ST362		VFY	SSME	ME-2 PHASE IN EFFECT		E41J251281 B110			GTO ST363
557-01			VFY	SSME	ME-3 OPERATING MODE		E41J351381 B011			GTO ST365
557-03	ST364		VFY	SSME	ME-3 PHASE IN EFFECT		E41J351281 B110			GTO ST365
561-13	ST372		CVFY	SSME	MPS ENG NO. 1 LH2 INLET PRESS		V41P100C1 N0L0 90	PSIA		CPER 6002
562-14	ST374		CVFY	SSME	MPS ENG NO. 2 LH2 INLET PRESS		V41P1200C1 N0L0 90	PSIA		CPER 6003
564-13	ST376		CVFY	SSME	MPS ENG NO. 3 LH2 INLET PRESS		V41P1300C1 N0L0 90	PSIA		CPER 6004
565-00			CMD	SSME	MPENG GN2 PRG VNT OPN CMD		GGNK105CE OFF			
565-01			CMD	SSME	MPENG GN2 PRG VNT OPN CMD		GGNK1140E OFF			
565-02			CMD	SSME	MPENG GN2 PRG VNT OPN CMD OVR		GGNK1057E ON			
565-03			CMD	SSME	MPENG GN2 PRG VNT OPN CMD OVR(R)		GGNK1147E ON			
565-04			CMD	SSME	MPENG GN2 PRG CNT VLV CLD CMD		GGNK1030E OFF			
565-05			CMD	SSME	MPENG GN2 PRG CNT VLV CLD CMD (R)		GGNK1130E OFF			
565-06			CMD	SSME	MPENG GN2 PRG CNT VLV CLD CMD OV		GGNK1037E ON			
565-07			CMD	SSME	MPENG GN2 PRG CNT CLD CMD OVR(R)		GGNK1137E ON			
570-00			VFY	SSME	ME-1 OPERATING MODE		E41J151381 B011			DISPLAY GTO ST390
570-01			VFY	SSME	ME-3 OPERATING MODE		E41J251381 B011			DISPLAY GTO ST390
570-02			VFY	SSME	MPENG GN2 PRG VNT CLD IND		E41J351381 B011			DISPLAY GTO ST390
617-00	ST465		VFY	SSME	MPENG GN2 PRG VNT CLD IND		GGNX1053E ON			DISPLAY
617-01			VFY	SSME	MPENG GN2 PRG VNT CLD IND(R)		GGNX1143E ON			OR
617-02			VFY	SSME	MPENG GN2 PRG CNT VLV OPN IND		GGNX1033E ON			DISPLAY
617-03			VFY	SSME	MPENG GN2 PRG CNT VLV OPN IND (R)		GGNX1133E ON			DISPLAY
617-04			VFY	SSME	MPENG GN2 PRG S/O VLV OPN IND		GGNX1073E ON			DISPLAY
617-05			VFY	SSME	MPENG GN2 PRG S/O VLV OPN IND (R)		GGNX1163E ON			DISPLAY
617-06			VFY	SSME	MPENG GN2 PRG OUT PRESS		GGNP1034A 630 900	PSIG		OR
617-07			VFY	SSME	MPENG GN2 PRG OUT PRESS(R)		GGNP1139A 630 900			DISPLAY
701-22			VFY	SSME	ME1 PAD DATA PATH FAIL HOLD		V9CX867CX1 OFF			DISPLAY
701-23			VFY	SSME	ME2 PAD DATA PATH FAIL HOLD		V9CX867TX1 OFF			DISPLAY

SEQ	TIME	CD	FUNC	DISC	NOMENCLATURE	VALUE	FUNCTION	DESIGNATOR	SINGL	OR	LO	HIGH	UNIT	ELSE	DURATION	LCC	PAGE
701-24	VFY	SSME	ME3	PAD DATA PATH FAIL HOLD	V9CX8672X1 OFF									DISPLAY			
701-25	VFY	SSME	ME1	CONTROL FAIL HOLD	V9CX8679X1 ON									GTO ST10			
701-26	VFY	SSME	ME-1	OPERATING MODE	E41J1513B1 B010	B100								2 OF 2			
701-27	VFY	SSME	ME-1	PHASE IN EFFECT	E41J1512B1 B010	B101								GTO ST01			
701-28	ST01	VFY	SSME	ME-1	OPERATING MODE	E41J1513B1 B011	B101							2 OF 2			
701-29	VFY	SSME	ME-1	PHASE IN EFFECT	E41J1512B1 B010	B101								GTO ST02			
701-30	ST02	VFY	SSME	ME-1	OPERATING MODE	E41J1514B1 B001	B011							GTO ST03			
701-31	ST03	VFY	SSME	ME-1	CHANNEL STATUS P3B4-6	E41J1509B1 B000								DISPLAY			
701-33	VFY	SSME	ME-2	OPERATING MODE	E41J2513B1 B010	B100								2 OF 2			
701-34	VFY	SSME	ME-2	PHASE IN EFFECT	E41J2512B1 B010	B101								GTO ST11			
701-35	ST11	VFY	SSME	ME-2	OPERATING MODE	E41J2513B1 B011	B101							2 OF 2			
701-36	VFY	SSME	ME-2	PHASE IN EFFECT	E41J2512B1 B010	B101								GTO ST12			
701-37	ST12	VFY	SSME	ME-2	OPERATING MODE	E41J2514B1 B001	B011							GTO ST13			
701-38	ST13	VFY	SSME	ME-2	CHANNEL STATUS P3B4-6	E41J2509B1 B000								DISPLAY			
701-40	VFY	SSME	ME-3	OPERATING MODE	E41J3513B1 B010	B100								2 OF 2			
701-41	VFY	SSME	ME-3	PHASE IN EFFECT	E41J3512B1 B010	B101								GTO ST21			
701-42	ST21	VFY	SSME	ME-3	OPERATING MODE	E41J3513B1 B011	B101							2 OF 2			
701-43	VFY	SSME	ME-3	PHASE IN EFFECT	E41J3512B1 B010	B101								GTO ST22			
701-44	ST22	VFY	SSME	ME-3	OPERATING MODE	E41J3514B1 B001	B011							GTO ST30			
701-45	VFY	SSME	ME-3	CHANNEL STATUS P3B4-6	E41J3509B1 B000									DISPLAY			
701-79	VFY	SSME	ENG1	SELF TEST STATUS	E41J1514B1 B01									DISPLAY			
701-80	VFY	SSME	ENG2	SELF TEST STATUS	E41J2514B1 B01									DISPLAY			
701-81	VFY	SSME	ENG3	SELF TEST STATUS	E41J3514B1 B01									DISPLAY			
701-82	VFY	SSME	ENG SHUTDOWN	VERIFICATION HOLD	V90X8389X1 OFF									DISPLAY			
701-83	VFY	SSME	UNCOMMANDED	ENG SHUTDOWN ABORT	V90X8771X1 OFF									DISPLAY			
701-84	VFY	SSME	MPS	ACT PORT COMM FAULT ABORT	V90X8772X1 OFF									DISPLAY			
701-85	VFY	SSME	ME-1	LOW CHAMBER PRESS ABORT	V90X8773X1 OFF									DISPLAY			
701-86	VFY	SSME	ME-2	LOW CHAMBER PRESS ABORT	V90X8774X1 OFF									DISPLAY			
701-87	VFY	SSME	ME-3	LOW CHAMBER PRESS ABORT	V90X8775X1 OFF									DISPLAY			
701-88	VFY	SSME	ME-1	ACT PORT FAIL ABORT	V90X8776X1 OFF									DISPLAY			
701-89	VFY	SSME	ME-2	ACT PORT FAIL ABORT	V90X8777X1 OFF									DISPLAY			
701-90	VFY	SSME	ME-3	ACT PORT FAIL ABORT	V90X8778X1 OFF									DISPLAY			
*AT INT	CMD	INTG	START	GO13 TERMINATE LOX REPLENISH	GO13 ON												
*AT INT	CMD	INTG	START	GO17 CENTAUR PRESSURIZATION	GO17 ON												
056-00	VFY	TINS	TUMBLE	SYSTEM ARMED	T56X0002E1 OFF									INHB M009			
018-02	VFY	TRS	ET	RSS DCDR PWR ON/CHK TONE OFF	T55X1925E1 ON									7 OF 7			
019-04	CVFY	TRS	ET	RSS PIC CAP A VOLTAGE	T55V1730A1 N0LO	1.5	V							LCC-4			5.2-14
019-05	CVFY	TRS	ET	RSS PIC CAP B VOLTAGE	T55V1731A1 N0LO	1.5	V							LCC-4			5.2-14
052-10	VFY	TRS	ET	RSS BAT A V	T55V1735A1 26.7	32.3	V							INHB M009			5.2-12
052-11	VFY	TRS	ET	RSS BAT B V	T55V1736A1 26.7	32.3	V							INHB M009			5.2-13
052-12	VFY	TRS	ET	RSS DCDR PWR ON CHK TONE OFF	T55X1925E1 ON									INHB M009			5.2-15

SEQ	TIME	CD	I	FUNC	DISC	NOMENCLATURE	FUNCTION	SINGL	OR	LO	HIGH	UNIT	ELSE	DURATION	LCC	PAGE
SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS
052-17	VFY	TRS	ET	RSS	ARM	CMD	FROM	DCDR	IND							
052-22	VFY	TRS	ET	RSS	FIRE	CMD	FROM	DCDR	IND							
052-29	VFY	TRS	ET	RSS	S/A	DVC	ARMED									
052-32	VFY	TRS	ET	RSS	S/A	DVC	SAFED									
148-02	CMD	TRS	ET	RSS	S/A	DEVICE	ARM	CMD								
151-02	CMD	TRS	ET	RSS	S/A	DEVICE	ARM	CMD								
153-02	VFY	TRS	ET	RSS	S/A	DVC	ARMED									
153-05	VFY	TRS	ET	RSS	S/A	DVC	SAFED									
282-04	CMD	TRS	ET	RSS	INHIBIT/RESET	CMD										
530-02	CMD	TRS	ET	RSS	S/A	DEVICE	ARM	CMD								
530-03	CMD	TRS	ET	RSS	S/A	DEVICE	SAFE	1								
530-04	CMD	TRS	ET	RSS	S/A	DEVICE	SAFE	2								
538-00	CMD	TRS	ET	RSS	S/A	DEVICE	SAFE	1								
538-01	CMD	TRS	ET	RSS	S/A	DEVICE	SAFE	2								
602-00	VFY	TRS	ET	RSS	A	INHIBIT/RESET	IND									
602-01	VFY	TRS	ET	RSS	B	INHIBIT/RESET	IND									
613-00	VFY	TRS	ET	RSS	S/A	DVC	SAFED									
613-01	VFY	TRS	ET	RSS	S/A	DVC	ARMED									
005-00	K	CVFY	WATR	SS	PNEUMATIC	PRESSURE	PT1	STATUS		1600	PSIG			1	OF	2
005-01	K	CVFY	WATR	SS	PNEUMATIC	PRESSURE	PT2	STATUS		1600	PSIG			LCC-3		
005-02	K	CVFY	WATR	SS	PRE	L/O	VLV	-	LS	V27	CL	IND		LCC-1		
005-03	K	CVFY	WATR	SS	PRE	L/O	VLV	-	LS	V26	CL	IND		LCC-1		
005-04	K	CVFY	WATR	SS	PRE	L/O	VLV	-	LS	V25	CL	IND		LCC-1		
005-05	K	CVFY	WATR	SS	POST	L/O	VLV	-	LS	V30	CL	IND		LCC-1		
005-06	K	CVFY	WATR	SS	POST	L/O	VLV	-	LS	V29	CL	IND		LCC-1		
005-07	K	CVFY	WATR	SS	POST	L/O	VLV	-	LS	V28	CL	IND		LCC-1		
005-08	K	CVFY	WATR	SS	PRE	L/O	VLVS	-	OPEN	CMD				LCC-1		
005-09	K	CVFY	WATR	SS	PRE	L/O	VLVS	-	OPEN	CMD				LCC-1		
005-10	K	CVFY	WATR	SS	POST/L0	VLVS	OP	-	CMD	IND				LCC-1		
005-11	K	CVFY	WATR	SS	PRE/L0	VLVS	OP	-	CMD	IND				LCC-1		
005-12	K	CVFY	WATR	SS	PRE	L/O	VLVS	CLOSE	CMD	IND				LCC-1		
005-13	K	CVFY	WATR	SS	POST	L/O	VLVS	CLOSE	CMD	IND				LCC-1		
005-14	K	CVFY	WATR	SS	TANK	WATER	LEVEL							LCC-1		
005-15	K	CVFY	WATR	SS	TANK	WATER	LEVEL							LCC-1		
005-16	K	CVFY	WATR	SS	SOL	PWR	BUS	ON	IND					LCC-1		
005-17	K	CVFY	WATR	SS	SOL	PWR	BUS	ON	IND					LCC-1		
005-50	V	CVFY	WATR	SSM	PRI	WATER	LEVEL	IND		305.1	NOHI	FT		1	OF	2
005-51	V	CVFY	WATR	SSM	SEC	WATER	LEVEL	IND		305.1	NOHI	FT		LCC-1		
005-52	V	CVFY	WATR	SSM	PRI	GN2	SUPPLY	PRESS		1500	NOHI	PSIG		1	OF	2
005-53	V	CVFY	WATR	SSM	SEC	GN2	SUPPLY	PRESS		1500	NOHI	PSIG		LCC-3		
005-54	V	CVFY	WATR	SSM	PRI	GN2	VLV	CLOSING	PRESS	1500	NOHI	PSIG		1	OF	2

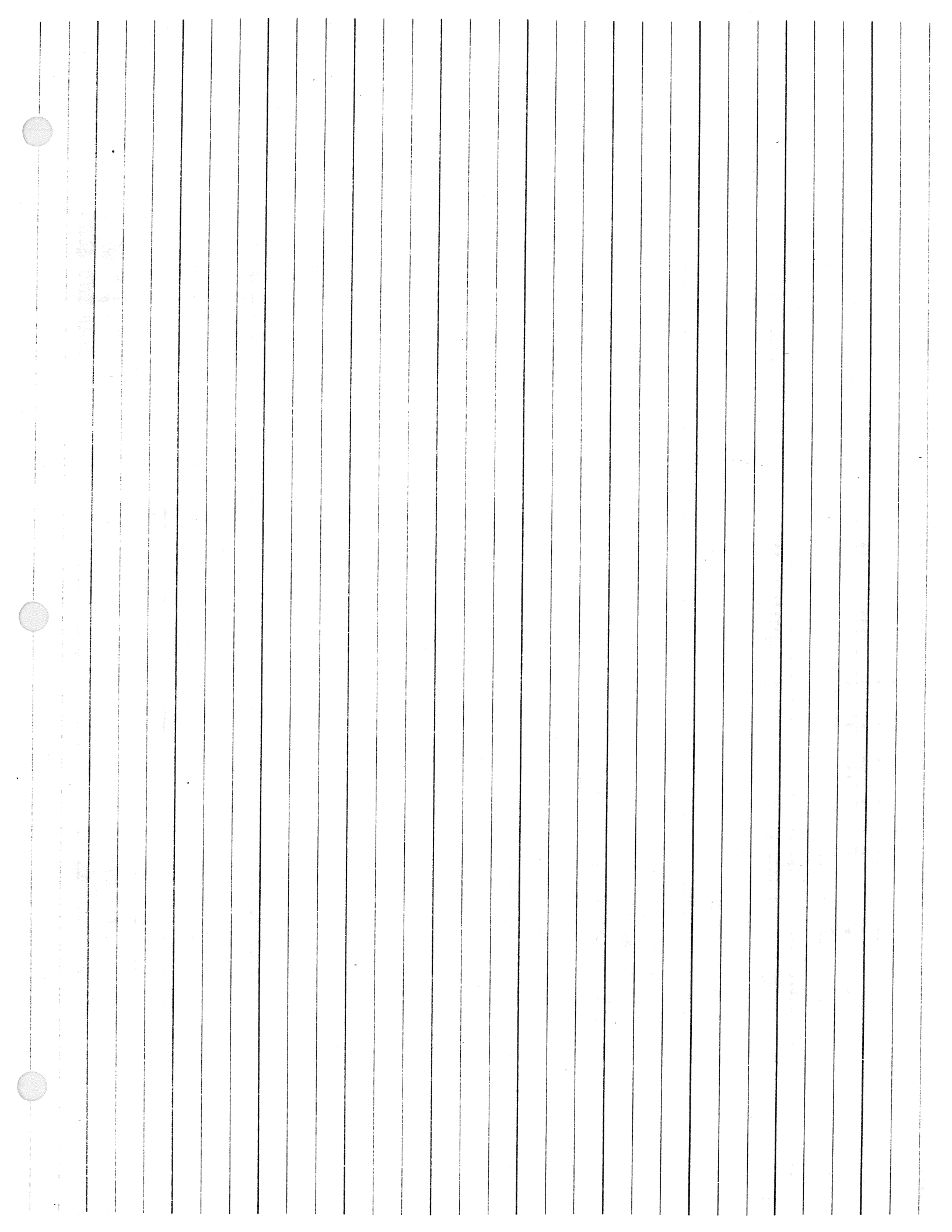


SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	NOHI	PSIG	LCC-2	DURATION	LCC
CD	CLOCK	E	T	S		DESIGNATOR	OR LO:HIGH	UNIT	ELSE	INHB	M009	PAGE

005-55	V	CVFY	WATR	SSW	SEC	GN2	VLV	CLOSING	PRESS	XWDPVF54A	1500	NOHI	PSIG	LCC-2
051-00	K	VFY	WATR	TS/CCS	OP	CMD	LOCKOUT	IND		GWDXPT47E	ON			INHB M009
051-01	K	VFY	WATR	VO/LPS	ENABLED	IND				GWDXPT13E	ON			INHB M009
059-00	V	VFY	WATR	SSW	PRI	DC	POWER	ON	IND	XMDXVB73E	ON			1 OF 2
059-01	V	VFY	WATR	SSW	SEC	DC	POWER	ON	IND	XMDXVB83E	ON			INHB M009
059-02	V	VFY	WATR	SSW	PRI	DC	POWER	BUS	ON	XMDXVB03E	ON			1 OF 2
059-03	V	VFY	WATR	SSW	SEC	DC	POWER	BUS	ON	XMDXVB13E	ON			INHB M009
226-00	K	CMD	WATR	PTCR	VO/LPS	CMD	BUS	ON	CMD	GWDKPT08E	ON			
226-01	K	CMD	WATR	PTCR	VO/LPS	CMD	BUS	ON	CMD	GWDKPT11E	ON			
232-00	K	VFY	WATR	SS	VO	LCC	BUS	ARM	IND	GWDXPT09E	ON			1 OF 2
232-01	K	VFY	WATR	SS	VO	LCC	BUS	ARM	IND	GWDXPT12E	ON			INHB MSEQ
232-50	V	CMD	WATR	SSW	PRI	MAIN	VLVS	CLOSE	CMD	XWDKVB20E	OFF			
232-51	V	CMD	WATR	SSW	SEC	MAIN	VLVS	CLOSE	CMD	XWDKVF60E	OFF			
232-52	V	CMD	WATR	SSW	PRI	MAIN	VLVS	CLOSE	ENABLE	XWDKVD21E	OFF			
232-53	V	CMD	WATR	SSW	SEC	MAIN	VLVS	CLOSE	ENABLE	CMD	XWDKVF80E	OFF		
232-54	V	CMD	WATR	SSW	PRI	MAIN	VLVS	OPEN	ENABLE	XWDKVCC1E	ON			
232-55	V	CMD	WATR	SSW	SEC	MAIN	VLVS	OPEN	ENABLE	XWDKVC11E	ON			
238-50	V	VFY	WATR	SSW	PRI	MAIN	V	OPEN	ENABLE	XWDXVC03E	ON			1 OF 2
238-51	V	VFY	WATR	SSW	SEC	MAIN	V	OPEN	ENABLE	XWDXVC13E	ON			INHB MSEQ
238-52	V	CMD	WATR	ATWD	ARM	AREA	A			XWDKVD71E	ON			
238-53	V	CMD	WATR	ATWD	ARM	AREA	B			XWDKVD51E	ON			
250-01	V	VFY	WATR	SSW	PRI	GN2	VLV	CLOSING	PRESS	XWDPVF44A	NOLO	50	PSIG	1 OF 2
250-02	V	VFY	WATR	SSW	SSEC	GN2	VLV	CLOSING	PRESS	XWDPVF54A	NOLO	50	PSIG	INHB MSEQ
260-00	K	CMD	WATR	SS	PRE	L/O	VLVS	VENT	CMD	GWDKPT36E	ON			
260-01	K	CMD	WATR	SS	PRE	L/O	VLVS	VENT	CMD	GWDKPT22E	ON			
270-00	V	CMD	WATR	ATWD	ET	ARM	OPEN	CMD		XWDKVD61E	ON			
270-01	V	CMD	WATR	LH2	AREA	WASHDN	INITIATE	CMD		XWDKV061E	ON			
270-02	V	CMD	WATR	L02	AREA	WASHDN	INITIATE	CMD		XWDKV071E	ON			
271-01	K	CMD	WATR	SS	PRE	L/O	VLVS	OPEN	CMD	GWDKPT30E	ON			
271-02	K	CMD	WATR	SS	PRE	L/O	VLVS	OPEN	CMD	GWDKPT32E	ON			
271-50	V	CMD	WATR	SSW	PRI	MAIN	VLVS	OPEN	CMD	XWDKVB21E	ON			
271-51	V	CMD	WATR	SSW	SEC	MAIN	VLVS	OPEN	CMD	XWDKVC21E	ON			
273-00	K	CMD	WATR	SS	POST	L/O	VLVS	VENT	CMD	GWDKPT38E	ON			
273-01	K	CMD	WATR	SS	POST	L/O	VLVS	VENT	CMD	GWDKPT24E	ON			
285-00	K	VFY	WATR	SS	PRE	L/O	VLV	- LS	V27	OP	IND			2 OF 3
285-01	K	VFY	WATR	SS	PRE	L/O	VLV	- LS	V26	OP	IND			2 OF 3
285-02	K	VFY	WATR	SS	PRE	L/O	VLV	- LS	V25	OP	IND			EXIT
286-00	K	VFY	WATR	SS	POSTLFTF	VENT	VLV	SV8	OP	IND				2 OF 3
286-01	K	VFY	WATR	SS	POSTLFTF	VENT	VLV	SV9	OP	IND				2 OF 3
286-02	K	VFY	WATR	SS	POSTLFTF	VENT	VLV	SV10	OP	IND				EXIT
286-50	V	VFY	WATR	PRI	MAIN	VLV	1			XWDXVB23E	ON			1 OF 2

SEQ	I	TIME	CD	CLOCK	FUNC	DISC	NOMENCLATURE	VALUE	FUNCTION	DESIGNATOR	SINGL	ELSE	DURATION	LCC	PAGE
286-51	V	VFY	WATR	SEC	MAIN	VLV	1		XWDXVC23E	ON			1 OF 2		
286-52	V	VFY	WATR	PRI	MAIN	VLV	2		XWDXVB33E	ON			1 OF 2		
286-53	V	VFY	WATR	SEC	MAIN	VLV	2		XWDXVC33E	ON			1 OF 2		
286-54	V	VFY	WATR	PRI	MAIN	VLV	3		XWDXVB43E	ON			1 OF 2		
286-55	V	VFY	WATR	SEC	MAIN	VLV	3		XWDXVC43E	ON			1 OF 2		
286-56	V	VFY	WATR	PRI	MAIN	VLV	4		XWDXVB53E	ON			1 OF 2		
286-57	V	VFY	WATR	SEC	MAIN	VLV	4		XWDXVC53E	ON			1 OF 2		
286-58	V	VFY	WATR	PRI	MAIN	VLV	5		XWDXVB63E	ON			1 OF 2		
313-50	V	CMD	WATR	SEC	MAIN	VLV	5		XWDXVC63E	ON			1 OF 2		
313-51	V	CMD	WATR	MST	WASHDOWN				XWDKVO51E	ON					
313-52	V	CMD	WATR	AT	WASHDOWN				XWDKVO41E	ON					
313-53	V	CMD	WATR	CAA	EGRESS	ROUTE	OPEN	B	XWKDVP31E	ON					
318-00	K	CMD	WATR	CAA	VALVES	OPEN	COMMAND		XWDKVA71E	ON					
318-01	K	CMD	WATR	SS	PRE	L/O	VLVS	VENT	GMDDKPT36E	OFF					
318-02	K	CMD	WATR	SS	PRE	L/O	VLVS	VENT	GMDDKPT22E	OFF					
318-03	K	CMD	WATR	SS	PRE	L/O	VLVS	OPEN	GMDDKPT30E	OFF					
318-04	K	CMD	WATR	SS	PRE	L/O	VLVS	OPEN	GMDDKPT32E	OFF					
318-05	K	CMD	WATR	SS	POST	L/O	VLVS	VENT	GMDDKPT38E	OFF					
320-00	V	CMD	WATR	SSM	PRI	MAIN	VALVE	OPEN	GMDDKPT24E	OFF					
320-01	V	CMD	WATR	SSM	SEC	MAIN	VALVE	OPEN	XWDKVB21E	OFF					
320-02	V	CMD	WATR	SSM	PRI	MAIN	VALVE	OPEN	XWDKVC21E	OFF					
320-03	V	CMD	WATR	SSM	SEC	MAIN	VALVE	OPEN	XWDKVC01E	OFF					
320-04	K	CMD	WATR	PTCR	VO/LPS	CMD	BUS	ON	XWDKVC11E	OFF					
320-05	K	CMD	WATR	PTCR	VO/LPS	CMD	BUS	ON	GMDDKPTC8E	ON					
320-06	K	CMD	WATR	TS/VO	CONTROL	TS-ON	VO-OFF		GMDDKPT10E	ON					
320-07	K	CMD	WATR	TS/VO	CONTROL	TS-ON	VO-OFF		GMDDKPT34E	ON					
320-08	K	CMD	WATR	PTCR	VO/LPS	CMD	BUS	ON	GMDDKPT35E	ON					
320-09	K	CMD	WATR	PTCR	VO/LPS	CMD	BUS	ON	GMDDKPT08E	OFF					
320-10	K	CMD	WATR	PTCR	VO/LPS	CMD	BUS	OFF	GMDDKPT10E	OFF					
320-11	K	CMD	WATR	PTCR	VO/LPS	CMD	BUS	OFF	GMDDKPT09E	ON					
320-12	K	CMD	WATR	TS/VO	CONTROL	TS-ON	VO-OFF		GMDDKPT13E	ON					
320-13	K	CMD	WATR	TS/VO	CONTROL	TS-ON	VO-OFF		GMDDKPT34E	OFF					
320-14	K	CMD	WATR	PTCR	VO/LPS	CMD	BUS	OFF	GMDDKPT35E	OFF					
320-15	K	CMD	WATR	PTCR	VO/LPS	CMD	BUS	OFF	GMDDKPT09E	OFF					
519-50	V	CMD	WATR	LH2	AREA	WASHDOWN	INITIATE	CMD	GMDDKPT13E	OFF					
519-51	V	CMD	WATR	L02	AREA	WASHDOWN	INITIATE	CMD	XWDKVO61E	OFF					
598-00	V	CMD	WATR	SSM	PRI	MAIN	VALVE	OPEN	XWDKVO71E	OFF					
598-01	V	CMD	WATR	SSM	SEC	MAIN	VALVE	OPEN	XWDKVB21E	OFF					
598-02	V	CMD	WATR	SSM	PRI	MAIN	VALVE	OPEN	XWDKVC21E	OFF					
598-03	V	CMD	WATR	SSM	SEC	MAIN	VALVE	OPEN	XWDKVC01E	OFF					





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-- 3 0 -- DATE 12-12-85 TIME 12.693 PR 0 19 PRI-C1

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	INHB	PSEQ
:	CD	:	:	:	:	DESIGNATOR	:	:	:	1 OF 2	LCC
:	CLOCK	:	:	:	:	SINGL	:	:	:	INHB	PAGE
:	:	:	:	:	:	:	OR LO	HIGH	UNIT	:	:

034-06			CVFY	SSME	ME-2	HPFT DISCH TEMP (CHB)	E41T2011B1	360	NOHI	DEGR	INHB	PSEQ
034-07			CVFY	SSME	ME-3	HPFT DISCH TEMP (CHA)	E41T3010B1	360	NOHI	DEGR	1 OF 2	6.2.2-19
034-08			CVFY	SSME	ME-3	HPFT DISCH TEMP (CHB)	E41T3011B1	360	NOHI	DEGR		6.2.2-19
115-00			ACL	SSME	MPENG	GN2 PRG OUT PRESS	GGNP1034A				INHB	MSEQ
115-01			ACL	SSME	MPENG	GN2 PRG OUT PRESS(R)	GGNP1139A					
155-00			CMD	SSME	ME-1	MFV HEATER PWR ON CMD	GGNK102CE	OFF				
155-01			CMD	SSME	ME-1	MFV HEATER PWR ON (R) CMD	GGNK111CE	OFF				
155-02			CMD	SSME	ME-1	MFV HEATER PWR OFF CMD	GGNK1021E	ON				
155-03			CMD	SSME	ME-1	MFV HEATER PWR OFF (R) CMD	GGNK1141E	ON				
155-04			CMD	SSME	ME-2	MFV HEATER PWR ON CMD	GGNK1040E	OFF				
155-05			CMD	SSME	ME-2	MFV HEATER PWR ON (R) CMD	GGNK1150E	OFF				
155-06			CMD	SSME	ME-2	MFV HEATER PWR OFF CMD	GGNK1041E	ON				
155-07			CMD	SSME	ME-2	MFV HEATER PWR OFF (R) CMD	GGNK1151E	ON				
155-08			CMD	SSME	ME-3	MFV HEATER PWR ON CMD	GGNK1060E	OFF				
155-09			CMD	SSME	ME-3	MFV HEATER PWR ON (R) CMD	GGNK1170E	OFF				
155-10			CMD	SSME	ME-3	MFV HEATER PWR OFF CMD	GGNK1061E	ON				
155-11			CMD	SSME	ME-3	MFV HEATER PWR OFF (R) CMD	GGNK1161E	ON				
160-00			VFY	SSME	ME-1	HYDRAULIC PRESSURE	E41P1054B1	2700	NOHI	PSIA	INHB	MPS4
160-01			VFY	SSME	ME-2	HYDRAULIC PRESSURE	E41P2054B1	2700	NOHI	PSIA	INHB	MPS4
160-02			VFY	SSME	ME-3	HYDRAULIC PRESSURE	E41P3054B1	2700	NOHI	PSIA	INHB	MPS4
165-00			ISSU	SSME	ME-1	PURGE SEQ NO. 4 (ISSUE FD)	E41K1216B1	ON				6.2.2-15
165-01			ISSU	SSME	ME-2	PURGE SEQ NO. 4 (ISSUE FD)	E41K216B1	ON				6.2.2-15
165-02			ISSU	SSME	ME-3	PURGE SEQ NO. 4 (ISSUE FD)	E41K3216B1	ON				6.2.2-15
168-00			CVFY	SSME	ME-1	OPERATING MODE	E41J1513B1	B100			INHB	MSEQ TIL MLH2
168-01			CVFY	SSME	ME-2	OPERATING MODE	E41J2513B1	B100			INHB	MSEQ TIL MLH2
168-02			CVFY	SSME	ME-3	OPERATING MODE	E41J3513B1	B100			INHB	MSEQ TIL MLH2
168-03			CVFY	SSME	ME-1	PHASE IN EFFECT	E41J1512B1	B010			INHB	MSEQ
168-04			CVFY	SSME	ME-2	PHASE IN EFFECT	E41J2512B1	B010			INHB	MSEQ
168-05			CVFY	SSME	ME-3	PHASE IN EFFECT	E41J3512B1	B010			INHB	MSEQ
200-00			CMD	SSME	MPENG	GN2 PRG CNT VLV CLD CMD	GGNK1030E	ON			INHB	MSEQ
200-01			CMD	SSME	MPENG	GN2 PRG CNT VLV CLD CMD (R)	GGNK113CE	ON				
200-02			CMD	SSME	MPENG	GN2 PRG CNT VLV CLD CMD OV	GGNK1037E	OFF				
200-03			CMD	SSME	MPENG	GN2 PRG CNT CLD CMD OVR (R)	GGNK1137E	OFF				
200-04			CMD	SSME	MPENG	GN2 PRG VNT OPN CMD	GGNK1050E	ON				
200-05			CMD	SSME	MPENG	GN2 PRG VNT OPN CMD	GGNK1140E	ON				
200-06			CMD	SSME	MPENG	GN2 PRG VNT OPN CMD OVR	GGNK1057E	OFF				
200-07			CMD	SSME	MPENG	GN2 PRG VNT OPN CMD OVR (R)	GGNK1147E	OFF				
240-00			CVFY	SSME	ME-1	OPERATING MODE	E41J1513B1	B110			INHB	MSEQ
240-01			CVFY	SSME	ME-2	OPERATING MODE	E41J2513B1	B110			INHB	MSEQ
240-02			CVFY	SSME	ME-3	OPERATING MODE	E41J3513B1	B110			INHB	MSEQ
527-00			CMD	SSME	MPENG	GN2 PRG VNT OPN CMD	GGNK1050E	OFF				

SEQ	TIME	CD	CLOCK	S	I	FUNC	DISC	NOMENCLATURE	FUNCTION	ELSE	DURATION	LCC	PAGE
:	:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	VALUE	:	:	:	:	:
:	:	:	:	:	:	:	:	:	DESIGNATOR	:	:	:	:
:	:	:	:	:	:	:	:	:	:	OR	LO	HIGH	UNIT
:	:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:	:	:	:	:
527-01						CMD	SSME	MPENG GN2 PRG VNT OPN CMD	GGNK114CE	OFF			
527-02						CMD	SSME	MPENG GN2 PRG VNT OPN CMD OVR	GGNK1057E	ON			
527-03						CMD	SSME	MPENG GN2 PRG VNT OPN CMD OVR (R)	GGNK1147E	ON			
527-04						CMD	SSME	MPENG GN2 PRG CNT CLD CMD	GGNK1030E	OFF			
527-05						CMD	SSME	MPENG GN2 PRG CNT VLV CLD CMD (R)	GGNK1130E	OFF			
527-06						CMD	SSME	MPENG GN2 PRG CNT VLV CLD CMD OV	GGNK1037E	ON			
527-07						CMD	SSME	MPENG GN2 PRG CNT CLD CMD OVR (R)	GGNK1137E	ON			
528-00						VFY	SSME	ME-1 PHASE IN EFFECT	E41J151281	B010	GTO	ST320	
528-01						VFY	SSME	ME-1 OPERATING MODE	E41J151381	B011	GTO	ST315	
528-02	ST315					ISSU	SSME	ME-1 RESUME COMMAND	E41K12028L	ON			
528-03						ISSU	SSME	ME-1 LIMIT CONTROL ENABLE	E41K12118L	ON			
528-04						ISSU	SSME	ME-1 RESUME COMMAND	E41K12028L	ON			
528-05						ISSU	SSME	ME-1 PURGE SEQUENCE 3 CMD	E41K12158L	ON			
528-06	ST320					VFY	SSME	ME-2 PHASE IN EFFECT	E41J251281	B010	GTO	ST325	
528-07						VFY	SSME	ME-2 OPERATING MODE	E41J251381	B011	GTO	ST321	
528-08	ST321					ISSU	SSME	ME-2 RESUME COMMAND	E41K22028L	ON			
528-09						ISSU	SSME	ME-2 LIMIT CONTROL ENABLE	E41K22118L	ON			
528-10						ISSU	SSME	ME-2 RESUME COMMAND	E41K22028L	ON			
528-11						ISSU	SSME	ME-2 PURGE SEQUENCE 3 CMD	E41K22158L	ON			
528-12	ST325					VFY	SSME	ME-3 PHASE IN EFFECT	E41J351281	B010	GTO	ST330	
528-13						VFY	SSME	ME-3 OPERATING MODE	E41J351381	B011	GTO	ST326	
528-14	ST326					ISSU	SSME	ME-3 RESUME COMMAND	E41K32028L	ON			
528-15						ISSU	SSME	ME-3 LIMIT CONTROL ENABLE	E41K32118L	ON			
528-16						ISSU	SSME	ME-3 RESUME COMMAND	E41K32028L	ON			
528-17						ISSU	SSME	ME-3 PURGE SEQUENCE 3 CMD	E41K32158L	ON			
529-00						CMD	SSME	ME-1 MFV HEATER PWR ON CMD	GGNK1020E	ON			
529-02						CMD	SSME	ME-1 MFV HEATER PWR OFF CMD	GGNK1021E	OFF			
529-03						CMD	SSME	ME-1 HEATER PWR OFF (R) CMD	GGNK1141E	OFF			
529-04						CMD	SSME	ME-2 MFV HEATER PWR ON CMD	GGNK1040E	ON			
529-06						CMD	SSME	ME-2 MFV HEATER PWR OFF CMD	GGNK1041E	OFF			
529-07						CMD	SSME	ME-2 MFV HEATER PWR OFF (R) CMD	GGNK1151E	OFF			
529-08						CMD	SSME	ME-3 HEATER PWR ON CMD	GGNK1060E	ON			
529-10						CMD	SSME	ME-3 MFV HEATER PWR OFF CMD	GGNK1061E	OFF			
529-11						CMD	SSME	ME-3 MFV HEATER PWR OFF (R) CMD	GGNK1161E	OFF			
552-00						VFY	SSME	ME-1 PHASE IN EFFECT	E41J151281	B010	GTO	ST353	
552-01						VFY	SSME	ME-1 OPERATING MODE	E41J151381	B011	GTO	ST351	
552-02	ST351					ISSU	SSME	ME-1 RESUME COMMAND	E41K12028L	ON			
552-03						ISSU	SSME	ME-1 LIMIT CONTROL ENABLE CMD	E41K12118L	ON			
552-04						ISSU	SSME	ME-1 RESUME COMMAND	E41K12028L	ON			
552-05						ISSU	SSME	ME-1 PURGE SEQUENCE 3 CMD	E41K12158L	ON			
553-00	ST353					VFY	SSME	ME-2 PHASE IN EFFECT	E41J251281	B010	GTO	ST356	

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
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553-01		VFY	SSME	ME-2	OPERATING MODE	E41J251381 B011				
553-02	ST354	ISSU	SSME	ME-2	RESUME CMD	E41K2202BL ON		GTO ST354		
553-03		ISSU	SSME	ME-2	LIMIT CONTROL ENABLE CMD	E41K2211BL ON				
553-04		ISSU	SSME	ME-2	RESUME CMD	E41K2202BL ON				
553-05		ISSU	SSME	ME-2	PURGE SEQUENCE 3 CMD	E41K2215BL ON				
554-00	ST356	VFY	SSME	ME-3	PHASE IN EFFECT	E41J3512B1 B010		GTO ST359		
554-01		VFY	SSME	ME-3	OPERATING MODE	E41J351381 B011		GTO ST357		
554-02	ST357	ISSU	SSME	ME-3	RESUME CMD	E41K3202BL ON				
554-03		ISSU	SSME	ME-3	LIMIT CONTROL ENABLE CMD	E41K3211BL ON				
554-04		ISSU	SSME	ME-3	RESUME CMD	E41K3202BL ON				
554-05		ISSU	SSME	ME-3	PURGE SEQUENCE 3 CMD	E41K3215BL ON				
555-01		VFY	SSME	ME-1	OPERATING MODE	E41J151381 B011		GTO ST361		
555-03	ST360	VFY	SSME	ME-1	PHASE IN EFFECT	E41J151281 B110		GTO ST361		
556-01		VFY	SSME	ME-2	OPERATING MODE	E41J251381 B011		GTO ST363		
556-03	ST362	VFY	SSME	ME-2	PHASE IN EFFECT	E41J251281 B110		GTO ST363		
557-01		VFY	SSME	ME-3	OPERATING MODE	E41J351381 B011		GTO ST365		
557-03	ST364	VFY	SSME	ME-3	PHASE IN EFFECT	E41J351281 B110		GTO ST365		
561-13	ST372	CVFY	SSME	MPS	ENG NO. 1 LH2 INLET PRESS	V41P1100C1 N0L0	90	PSIA		
562-14	ST374	CVFY	SSME	MPS	ENG NO. 2 LH2 INLET PRESS	V41P1200C1 N0L0	90	PSIA		
564-13	ST376	CVFY	SSME	MPS	ENG NO. 3 LH2 INLET PRESS	V41P1300C1 N0L0	90	PSIA		
565-00		CMD	SSME	MPENG	GN2 PRG VNT OPN CMD	GGNK105CE	OFF			
565-01		CMD	SSME	MPENG	GN2 PRG VNT OPN CMD	GGNK1140E	OFF			
565-02		CMD	SSME	MPENG	GN2 PRG VNT OPN CMD OVR	GGNK1057E	ON			
565-03		CMD	SSME	MPENG	GN2 PRG VNT OPN CMD OVR(R)	GGNK1147E	ON			
565-04		CMD	SSME	MPENG	GN2 PRG CNT VLV CLD CMD	GGNK1030E	OFF			
565-05		CMD	SSME	MPENG	GN2 PRG CNT VLV CLD CMD(R)	GGNK1130E	OFF			
565-06		CMD	SSME	MPENG	GN2 PRG CNT VLV CLD CMD OV	GGNK1037E	ON			
565-07		CMD	SSME	MPENG	GN2 PRG CNT CLD CMD OVR(R)	GGNK1137E	ON			
570-00		VFY	SSME	ME-1	OPERATING MODE	E41J151381 B011		DISPLAY	GTO ST390	
570-01		VFY	SSME	ME-2	OPERATING MODE	E41J251381 B011		DISPLAY	GTO ST390	
570-02		VFY	SSME	ME-3	OPERATING MODE	E41J351381 B011		DISPLAY	GTO ST390	
617-00	ST465	VFY	SSME	MPENG	GN2 PRG VNT CLD IND	GGNX1053E	ON	DISPLAY		
617-01		VFY	SSME	MPENG	GN2 PRG VNT CLD IND	GGNX1143E	ON	OR		
617-02		VFY	SSME	MPENG	GN2 PRG CNT VLV OPN IND	GGNX1033E	ON	OR		
617-03		VFY	SSME	MPENG	GN2 PRG CNT VLV OPN IND(R)	GGNX1133E	ON	DISPLAY		
617-04		VFY	SSME	MPENG	GN2 PRG S/O VLV OPN IND	GGNX1073E	ON	DISPLAY		
617-05		VFY	SSME	MPENG	GN2 PRG S/O VLV OPN IND(R)	GGNX1163E	ON	DISPLAY		
617-06		VFY	SSME	MPENG	GN2 PRG OUT PRESS	GGNP1034A	630	OR		
617-07		VFY	SSME	MPENG	GN2 PRG OUT PRESS(R)	GGNP1135A	630	PSIG		
701-22		VFY	SSME	ME1	PAD DATA PATH FAIL HOLD	V9CX867CX1	OFF	DISPLAY		
701-23		VFY	SSME	ME2	PAD DATA PATH FAIL HOLD	V9CX867TX1	OFF	DISPLAY		



SEQ	TIME	CD	FUNC	DISC	NOMENCLATURE	VALUE	FUNCTION	DESIGNATOR	SINGL	OR	LO	HIGH	UNIT	ELSE	DURATION	LCC	PAGE
701-24	VFY	SSME	ME3	PAD DATA PATH FAIL HOLD	V9CX8672X1 OFF									DISPLAY			
701-25	VFY	SSME	ME1	CONTROL FAIL HOLD	V9CX8679X1 ON									GTO ST10			
701-26	VFY	SSME	ME-1	OPERATING MODE	E41J1513B1 B010	B100								2 OF 2			
701-27	VFY	SSME	ME-1	PHASE IN EFFECT	E41J1512B1 B010	B101								GTO ST01			
701-28	ST01	VFY	SSME	ME-1	OPERATING MODE	E41J1513B1 B011	B101							2 OF 2			
701-29	VFY	SSME	ME-1	PHASE IN EFFECT	E41J1512B1 B010	B101								GTO ST02			
701-30	ST02	VFY	SSME	ME-1	OPERATING MODE	E41J1514B1 B001	B011							GTO ST03			
701-31	ST03	VFY	SSME	ME-1	CHANNEL STATUS P3B4-6	E41J1509B1 B000								DISPLAY			
701-33	VFY	SSME	ME-2	OPERATING MODE	E41J2513B1 B010	B100								2 OF 2			
701-34	VFY	SSME	ME-2	PHASE IN EFFECT	E41J2512B1 B010	B101								GTO ST11			
701-35	ST11	VFY	SSME	ME-2	OPERATING MODE	E41J2513B1 B011	B101							2 OF 2			
701-36	VFY	SSME	ME-2	PHASE IN EFFECT	E41J2512B1 B010	B101								GTO ST12			
701-37	ST12	VFY	SSME	ME-2	OPERATING MODE	E41J2514B1 B001	B011							GTO ST13			
701-38	ST13	VFY	SSME	ME-2	CHANNEL STATUS P3B4-6	E41J2509B1 B000								DISPLAY			
701-40	VFY	SSME	ME-3	OPERATING MODE	E41J3513B1 B010	B100								2 OF 2			
701-41	VFY	SSME	ME-3	PHASE IN EFFECT	E41J3512B1 B010	B101								GTO ST21			
701-42	ST21	VFY	SSME	ME-3	OPERATING MODE	E41J3513B1 B011	B101							2 OF 2			
701-43	VFY	SSME	ME-3	PHASE IN EFFECT	E41J3512B1 B010	B101								GTO ST22			
701-44	ST22	VFY	SSME	ME-3	OPERATING MODE	E41J3514B1 B001	B011							GTO ST30			
701-45	VFY	SSME	ME-3	CHANNEL STATUS P3B4-6	E41J3509B1 B000									DISPLAY			
701-79	VFY	SSME	ENG1	SELF TEST STATUS	E41J1514B1 B01									DISPLAY			
701-80	VFY	SSME	ENG2	SELF TEST STATUS	E41J2514B1 B01									DISPLAY			
701-81	VFY	SSME	ENG3	SELF TEST STATUS	E41J3514B1 B01									DISPLAY			
701-82	VFY	SSME	ENG SHUTDOWN	VERIFICATION HOLD	V90X8389X1 OFF									DISPLAY			
701-83	VFY	SSME	UNCOMMANDED	ENG SHUTDOWN ABORT	V90X8771X1 OFF									DISPLAY			
701-84	VFY	SSME	MPS	ACT PORT COMM FAULT ABORT	V90X8772X1 OFF									DISPLAY			
701-85	VFY	SSME	ME-1	LOW CHAMBER PRESS ABORT	V90X8773X1 OFF									DISPLAY			
701-86	VFY	SSME	ME-2	LOW CHAMBER PRESS ABORT	V90X8774X1 OFF									DISPLAY			
701-87	VFY	SSME	ME-3	LOW CHAMBER PRESS ABORT	V90X8775X1 OFF									DISPLAY			
701-88	VFY	SSME	ME-1	ACT PORT FAIL ABORT	V90X8776X1 OFF									DISPLAY			
701-89	VFY	SSME	ME-2	ACT PORT FAIL ABORT	V90X8777X1 OFF									DISPLAY			
701-90	VFY	SSME	ME-3	ACT PORT FAIL ABORT	V90X8778X1 OFF									DISPLAY			
*AT INT	CMD	INTG	START	GO13 TERMINATE LOX REPLENISH	GO13 ON												
*AT INT	CMD	INTG	START	GO17 CENTAUR PRESSURIZATION	GO17 ON												
056-00	VFY	TINS	TUMBLE	SYSTEM ARMED	T56X0002E1 OFF									INHB M009			
018-02	VFY	TRS	ET	RSS DCDR PWR ON/CHK TONE OFF	T55X1925E1 ON									7 OF 7			
019-04	CVFY	TRS	ET	RSS PIC CAP A VOLTAGE	T55V1730A1 N0LO	1.5	V							LCC-4			5.2-14
019-05	CVFY	TRS	ET	RSS PIC CAP B VOLTAGE	T55V1731A1 N0LO	1.5	V							LCC-4			5.2-14
052-10	VFY	TRS	ET	RSS BAT A V	T55V1735A1 26.7	32.3	V							INHB M009			5.2-12
052-11	VFY	TRS	ET	RSS BAT B V	T55V1736A1 26.7	32.3	V							INHB M009			5.2-13
052-12	VFY	TRS	ET	RSS DCDR PWR ON CHK TONE OFF	T55X1925E1 ON									INHB M009			5.2-15

DATE 12-10-85

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI 990C5 - L

SEQ	TIME	I	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC	PAGE
:	CD	:	:	:	:	DESIGNATOR	:	:	:	:	:
:	CLOCK	:	:	:	:	:	OR LO	:	:	:	:
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052-17		VFY	TRS		ET RSS ARM CMD FROM DCCR IND	T55X1931E1	OFF			INHB M009	5.2-22
052-22		VFY	TRS		ET RSS FIRE CMD FROM DCCR IND	T55X1933E1	OFF			INHB M009	5.2-24
052-29		VFY	TRS		ET RSS S/A DVC ARMED	T55X1870X1	OFF			INHB M009	5.2-4
052-32		VFY	TRS		ET RSS S/A DVC SAFED	T55X1869X1	ON			INHB M009	5.2-5
148-02		CMD	TRS		ET RSS S/A DEVICE ARM CMD	T55K3110XL	ON				
151-02		CMD	TRS		ET RSS S/A DEVICE ARM CMD	T55K3110XL	OFF				
153-02		VFY	TRS		ET RSS S/A DVC ARMED	T55X1870X1	ON			INHB MFS4	5.2-26
153-05		VFY	TRS		ET RSS S/A DVC SAFED	T55X1869X1	OFF			INHB MFS4	5.2-25
282-04		CMD	TRS		ET RSS INHIBIT/RESET CMD	T55K3001E	ON				
530-02		CMD	TRS		ET RSS S/A DEVICE ARM CMD	T55K3110XL	OFF				
530-03		CMD	TRS		ET RSS S/A DEVICE SAFE 1	T55K3111XL	ON				
530-04		CMD	TRS		ET RSS S/A DEVICE SAFE 2	T55K3112XL	ON				
538-00	ST350	CMD	TRS		ET RSS S/A DEVICE SAFE 1	T55K3111XL	OFF				
538-01		CMD	TRS		ET RSS S/A DEVICE SAFE 2	T55K3112XL	OFF				
602-00		VFY	TRS		ET RSS A INHIBIT/RESET IND	T55X1885X1	ON			DISPLAY	
602-01		VFY	TRS		ET RSS B INHIBIT/RESET IND	T55X2888X1	ON			DISPLAY	
613-00		VFY	TRS		ET RSS S/A DVC SAFED	T55X1869X1	ON			DISPLAY	
613-01		VFY	TRS		ET RSS S/A DVC ARMED	T55X1870X1	OFF			DISPLAY	
005-00		K	CVFY	WATR	SS PNEUMATIC PRESSURE PT1 STATUS	GWDPPT01A	1200	1600	PSIG	1 OF 2	3.1-18
005-01		K	CVFY	WATR	SS PNEUMATIC PRESSURE PT2 STATUS	GWDPPT02A	1200	1600	PSIG	LCC-3	3.1-18
005-02		K	CVFY	WATR	SS PRE L/O VLV - LS V27 CL IND	GWDXPT71E	ON			LCC-1	
005-03		K	CVFY	WATR	SS PRE L/O VLV - LS V26 CL IND	GWDXPT73E	ON			LCC-1	
005-04		K	CVFY	WATR	SS PRE L/O VLV - LS V25 CL IND	GWDXPT75E	ON			LCC-1	
005-05		K	CVFY	WATR	SS POST L/O VLV - LS V30 CL IND	GWDXPT65E	ON			LCC-1	
005-06		K	CVFY	WATR	SS POST L/O VLV - LS V29 CL IND	GWDXPT67E	ON			LCC-1	
005-07		K	CVFY	WATR	SS POST L/O VLV - LS V28 CL IND	GWDXPT69E	ON			LCC-1	
005-08		K	CVFY	WATR	SS PRE L/O VLVs - OPEN CMD	GWDKPT30ER	OFF			LCC-1	
005-09		K	CVFY	WATR	SS PRE L/O VLVs - OPEN CMD	GWDKPT32ER	OFF			LCC-1	
005-10		K	CVFY	WATR	SS POST/L0 VLVs OP - CMD IND	GWDXPT49E	OFF			LCC-1	
005-11		K	CVFY	WATR	SS PRE/L0 VLVs OP - CMD IND	GWDXPT33E	OFF			LCC-1	
005-12		K	CVFY	WATR	SS PRE L/O VLVs CLOSE CMD IND	GWDXPT42E	ON			LCC-1	
005-13		K	CVFY	WATR	SS POST L/O VLVs CLOSE CMD IND	GWDXPT43E	ON			LCC-1	
005-14		K	CVFY	WATR	SS TANK WATER LEVEL	GWdqT83A	258.2	NOHI	FT	1 OF 2	3.1-19
005-15		K	CVFY	WATR	SS TANK WATER LEVEL	GWdqT84A	258.2	NOHI	FT	LCC-1	3.1-19
005-16		K	CVFY	WATR	SS SOL PWR BUS ON IND	GWDXPT29E	ON			1 OF 2	3.1-21
005-17		K	CVFY	WATR	SS SOL PWR BUS ON IND	GWDXPT53E	ON			LCC-3	3.1-21
005-50		V	CVFY	WATR	SSM PRI WATER LEVEL IND	XWDQVF04A	305.1	NOHI	FT	1 OF 2	
005-51		V	CVFY	WATR	SSM SEC WATER LEVEL IND	XWDQVF14A	305.1	NOHI	FT	LCC-1	
005-52		V	CVFY	WATR	SSM PRI GN2 SUPPLY PRESS	XWDPVF24A	1500	NOHI	PSIG	1 OF 2	
005-53		V	CVFY	WATR	SSM SEC GN2 SUPPLY PRESS	XWDPVF34A	1500	NOHI	PSIG	LCC-3	
005-54		V	CVFY	WATR	SSM PRI GN2 VLV CLOSING PRESS	XWDPVF44A	1500	NOHI	PSIG	1 OF 2	

DATE	TIME	SEQ	CD	CLOCK	E	S	I	FUNC	DISC	NOMENCLATURE	DESIGNATOR	SINGL	OR	LO	HIGH	UNIT	VALUE	NOHI	PSIG	1500	FUNCTION	ELSE	DURATION	LCC	PAGE
12-10-85										GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33															

DATE 12-10-85

GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI 9005 - L

SEQ	I	TIME	DISC	FUNCTION	VALUE	ELSE	DURATION	LCC	S
CD	T			DESIGNATOR	SINGL			PAGE	S
CLOCK	E				OR	LO:	HIGH	UNIT	
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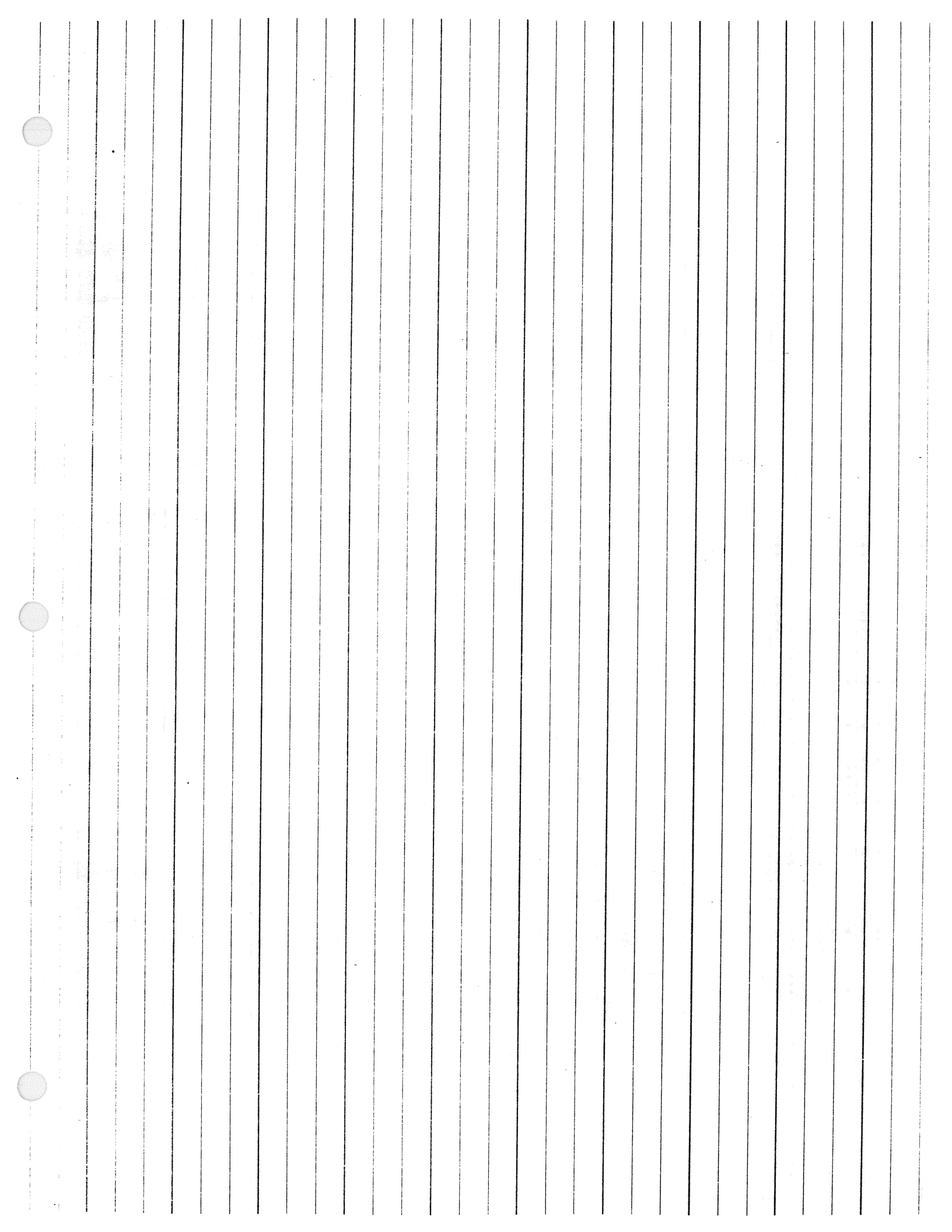
286-51	V	VFY	WATR	SEC MAIN VLV 1	XWDXVC23E	ON			1 OF 2
286-52	V	VFY	WATR	PRI MAIN VLV 2	XWDXVB33E	ON			1 OF 2
286-53	V	VFY	WATR	SEC MAIN VLV 2	XWDXVC33E	ON			1 OF 2
286-54	V	VFY	WATR	PRI MAIN VLV 3	XWDXVB43E	ON			1 OF 2
286-55	V	VFY	WATR	SEC MAIN VLV 3	XWDXVC43E	ON			1 OF 2
286-56	V	VFY	WATR	PRI MAIN VLV 4	XWDXVB53E	ON			1 OF 2
286-57	V	VFY	WATR	SEC MAIN VLV 4	XWDXVC53E	ON			1 OF 2
286-58	V	VFY	WATR	PRI MAIN VLV 5	XWDXVB63E	ON			1 OF 2
286-59	V	VFY	WATR	SEC MAIN VLV 5	XWDXVC63E	ON			1 OF 2
313-50	V	CMD	WATR	MST WASHDOWN INITIATE CMD	XWDKVO51E	ON			1 OF 2
313-51	V	CMD	WATR	AT WASHDOWN INITIATE CMD	XWDKVO41E	ON			
313-52	V	CMD	WATR	CAA/EGRESS ROUTE_OPEN_B CMD	XWKDVP31E	ON			
313-53	V	CMD	WATR	CAA VALVES OPEN COMMAND	XWDKVA71E	ON			
318-00	K	CMD	WATR	SS PRE L/O VLVS VENT CMD	GWDKPT36E	OFF			
318-01	K	CMD	WATR	SS PRE L/O VLVS VENT CMD	GWDKPT22E	OFF			
318-02	K	CMD	WATR	SS PRE L/O VLVS OPEN CMD	GWDKPT30E	OFF			
318-03	K	CMD	WATR	SS PRE L/O VLVS OPEN CMD	GWDKPT32E	OFF			
318-04	K	CMD	WATR	SS POST L/O VLVS VENT CMD	GWDKPT38E	OFF			
318-05	K	CMD	WATR	SS POST L/O VLVS VENT CMD	GWDKPT24E	OFF			
320-00	V	CMD	WATR	SSM PRI MAIN VALVE OPEN CMD	XWDKVB21E	OFF			
320-01	V	CMD	WATR	SSM SEC MAIN VALVE OPEN CMD	XWDKVC21E	OFF			
320-02	V	CMD	WATR	SSM PRI MAIN VALVE OPEN ENBLE CMD	XWDKVC01E	OFF			
320-03	V	CMD	WATR	SSM SEC MAIN VALVE OPEN ENBLE CMD	XWDKVC11E	OFF			
320-04	K	CMD	WATR	PTCR VO/LPS CMD BUS_ON CMD	GWDKPTC8E	ON			
320-05	K	CMD	WATR	PTCR VO/LPS CMD BUS_ON CMD	GWDKPT10E	ON			
320-06	K	CMD	WATR	TS/VO CONTROL TS-ON/VO-OFF	GWDKPT34E	ON			
320-07	K	CMD	WATR	PTCR VO/LPS CMD BUS_ON CMD	GWDKPT35E	ON			
320-08	K	CMD	WATR	PTCR VO/LPS CMD BUS_ON CMD	GWDKPT08E	OFF			
320-09	K	CMD	WATR	PTCR VO/LPS CMD BUS_OFF	GWDKPT10E	OFF			
320-10	K	CMD	WATR	PTCR VO/LPS CMD BUS_OFF	GWDKPT09E	ON			
320-11	K	CMD	WATR	TS/VO CONTROL TS-ON/VO-OFF	GWDKPT13E	ON			
320-12	K	CMD	WATR	TS/VO CONTROL TS-ON/VO-OFF	GWDKPT34E	OFF			
320-13	K	CMD	WATR	PTCR VO/LPS CMD BUS_OFF	GWDKPT35E	OFF			
320-14	K	CMD	WATR	PTCR VO/LPS CMD BUS_OFF	GWDKPT09E	OFF			
320-15	K	CMD	WATR	PTCR VO/LPS CMD BUS_OFF	GWDKPT13E	OFF			
519-50	V	CMD	WATR	LH2 AREA WASHDOWN INITIATE CMD	XWDKVO61E	OFF			
519-51	V	CMD	WATR	L02 AREA WASHDOWN INITIATE CMD	XWDKVO71E	OFF			
598-00	V	CMD	WATR	SSM PRI MAIN VALVE OPEN CMD	XWDKVB21E	OFF			
598-01	V	CMD	WATR	SSM SEC MAIN VALVE OPEN CMD	XWDKVC21E	OFF			
598-02	V	CMD	WATR	SSM PRI MAIN VALVE OPEN ENBLE CMD	XWDKVC01E	OFF			
598-03	V	CMD	WATR	SSM SEC MAIN VALVE OPEN ENBLE CMD	XWDKVC11E	OFF			

DATE 12-10-85 : GROUND LAUNCH SEQUENCE DESCRIPTION DOCUMENT - LCD STS 33

OMI S90C5 - L

SEQ	TIME	CD	FUNC	DISC	NOMENCLATURE	FUNCTION	VALUE	ELSE	DURATION	LCC
:	:	:	:	:	:	:	:	:	:	:
DESIGNATOR	SINGL	OR	LO	HIGH	UNIT	S	:	:	:	:

599-00	K	CMD	WATR	SS PRE	L/O VLVS VENT	CMD	GWDKPT36E	OFF		
599-01	K	CMD	WATR	SS PRE	L/O VLVS VENT	CMD	GWDKPT22E	OFF		
599-02	K	CMD	WATR	SS PRE	L/O VLVS OPEN	CMD	GWDKPT30E	OFF		
599-03	K	CMD	WATR	SS PRE	L/O VLVS OPEN	CMD	GWDKPT32E	OFF		
600-00	K	CMD	WATR	SS POST	L/O VLVS VENT	CMD	GWDKPT38E	OFF		
600-01	K	CMD	WATR	SS POST	L/O VLVS VENT	CMD	GWDKPT24E	OFF		
600-02	K	CMD	WATR	PTCR VO	L/PS CMD BUS	ON CMD	GWDKPTC8E	OFF		
600-03	K	CMD	WATR	PTCR VO	L/PS CMD BUS	ON CMD	GWDKPT10E	OFF		
600-04	K	VFY	WATR	SS PRE	L/O VLVS VENT		GWDXPT37E	ON	1 OF 3	
600-05	K	VFY	WATR	SS PRE	L/O VLVS VENT		GWDXPT38E	ON	1 OF 3	
600-06	K	VFY	WATR	SS PRE	L/O VLVS VENT		GWDXPT39E	ON	GTO ST430	
600-07	K	CMD	WATR	SS TURNAROUND	CTR		GWDKPT12E	ON		
600-08	K	CMD	WATR	SS TURNAROUND	CTR		GWDKPT14E	ON		
600-09	K	CMD	WATR	SS TURNAROUND	CTR		GWDKPT12E	OFF		
600-10	K	CMD	WATR	SS TURNAROUND	CTR		GWDKPT14E	OFF		
714-01	K	CMD	WATR	PTCR VO	L/PS CMD BUS	ON CMD	GWDKPT08E	ON		
714-02	K	CMD	WATR	PTCR VO	L/PS CMD BUS	ON CMD	GWDKPT10E	ON		
714-03	K	CMD	WATR	PTCR VO	L/PS CMD BUS	OFF	GWDKPT13E	OFF		
714-04	K	CMD	WATR	PTCR VO	L/PS CMD BUS	OFF	GWDKPT09E	OFF		
714-05	K	CMD	WATR	MLP ORBR	HS V336-337	ARM CMD	GWDKLU27E	ON		
714-06	K	CMD	WATR	MLP ORBR	HS V336-337	OP CMD	GWDKLU28E	ON		
714-07	K	CMD	WATR	MLP ORBR	HS V336-337	CL CMD	GWDKLU29E	OFF		
714-08	K	CMD	WATR	MLP ORBR	HS V336-337	CL CMD	GWDKLU71E	OFF		



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-- 3 0 -- DATE 12-12-85 TIME 12.693 PR 0 19 PRI-C1

LCC TABLE & ROW ASSIGNMENTS

LCC	FD	TYPE	T#	R#	SEQ	1ST	X	Y	FD1	FD2	FD3	FD4	L0	HI	UNIT	RSYS
LCC-3	V45X2155E1	DM	03	32	001-23	LCC	1	1	V45X2155F1	NULL	NULL	NULL	ON			FCP
LCC-3	V45X1160E1	DM	03	33	001-24	LCC	1	1	V45X1160E1	NULL	NULL	NULL	ON			FCP
LCC-3	V45X2160E1	DM	03	34	001-25	LCC	1	1	V45X2160E1	NULL	NULL	NULL	ON			FCP
LCC-3	V45P0147A1	AM	03	35	001-26	LCC	1	1	V45P0147A1	NULL	NULL	NULL	55	75	PSIA	FCP
LCC-3	V45P0247A1	AM	03	36	001-27	LCC	1	1	V45P0247A1	NULL	NULL	NULL	55	75	PSIA	FCP
LCC-3	V45P0347A1	AM	03	37	001-28	LCC	1	1	V45P0347A1	NULL	NULL	NULL	55	75	PSIA	FCP
LCC-3	V45X0143E1	DM	03	38	001-29	LCC	1	1	V45X0143E1	NULL	NULL	NULL	ON			FCP
LCC-3	V45X0243E1	DM	03	39	001-30	LCC	1	1	V45X0243E1	NULL	NULL	NULL	ON			FCP
LCC-3	V45X0343E1	DM	03	40	001-31	LCC	1	1	V45X0343E1	NULL	NULL	NULL	ON			FCP
LCC-3	B46X1853X1	DM	03	41	002-00	1 OF 2	1	2	B46X1853X1	B46X1851X1	NULL	NULL	ON			BHYD
LCC-3	B46X1851X1	DM	03	42	002-01	1 OF 2	2	2	R46X1853Y1	B46X1851X1	NULL	NULL	OFF			BHYD
LCC-3	B46X1854X1	DM	03	43	002-02	1 OF 2	1	2	R46X1854X1	B46X1852X1	NULL	NULL	ON			BHYD
LCC-3	B46X1852X1	DM	03	44	002-03	1 OF 2	2	2	R46X1854X1	B46X1852X1	NULL	NULL	OFF			BHYD
LCC-3	B46X2853X1	DM	03	45	002-04	1 OF 2	1	2	B46X2853X1	B46X2851X1	NULL	NULL	ON			BHYD
LCC-3	B46X2851X1	DM	03	46	002-05	1 OF 2	2	2	B46X2853X1	B46X2851X1	NULL	NULL	OFF			BHYD
LCC-3	B46X2854X1	DM	03	47	002-06	1 OF 2	1	2	R46X2854X1	B46X2852X1	NULL	NULL	ON			BHYD
LCC-3	B46X2852X1	DM	03	48	002-07	1 OF 2	2	2	R46X2854X1	B46X2852X1	NULL	NULL	OFF			BHYD
LCC-3	B46X2863X1	DM	03	49	002-08	LCC	1	1	B46X2863X1	NULL	NULL	NULL	ON			BHYD
LCC-3	B46X1861X1	DM	03	50	002-09	LCC	1	1	B46X1861Y1	NULL	NULL	NULL	ON			BHYD
LCC-3	B46X1863X1	DM	04	01	002-10	LCC	1	1	B46X1863X1	NULL	NULL	NULL	ON			BHYD
LCC-3	B46X2861X1	DM	04	02	002-11	LCC	1	1	B46X2861X1	NULL	NULL	NULL	ON			BHYD
LCC-3	V71X2021B1	DM	04	03	003-00	LCC	1	1	V71X2021B1	NULL	NULL	NULL	ON			GNS
LCC-3	V71X3021B1	DM	04	04	003-01	LCC	1	1	V71X3021B1	NULL	NULL	NULL	ON			GNS
LCC-3	V71X4021B1	DM	04	05	003-02	LCC	1	1	V71X4021B1	NULL	NULL	NULL	ON			GNS
LCC-3	V95X0033X1	DM	04	06	003-03	LCC	1	1	V95X0033X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X0034X1	DM	04	07	003-04	LCC	1	1	V95X0034X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X0035X1	DM	04	08	003-05	LCC	1	1	V95X0035X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X0037X1	DM	04	09	003-06	LCC	1	1	V95X0037X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V71X2405X1	DM	04	10	003-07	LCC	1	1	V71X2405X1	NULL	NULL	NULL	ON			GNS
LCC-3	V71X2407X1	DM	04	11	003-08	LCC	1	1	V71X2407X1	NULL	NULL	NULL	ON			GNS
LCC-3	V95X1033X1	DM	04	12	003-09	LCC	1	1	V95X1033X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X1034X1	DM	04	13	003-10	LCC	1	1	V95X1034X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X1035X1	DM	04	14	003-11	LCC	1	1	V95X1035X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X1037X1	DM	04	15	003-12	LCC	1	1	V95X1037X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V71X3405X1	DM	04	16	003-13	LCC	1	1	V71X3405X1	NULL	NULL	NULL	ON			GNS
LCC-3	V71X3407X1	DM	04	17	003-14	LCC	1	1	V71X3407X1	NULL	NULL	NULL	ON			GNS
LCC-3	V95X2033X1	DM	04	18	003-15	LCC	1	1	V95X2033X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X2034X1	DM	04	19	003-16	LCC	1	1	V95X2034X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X2035X1	DM	04	20	003-17	LCC	1	1	V95X2035X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X2037X1	DM	04	21	003-18	LCC	1	1	V95X2037X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V71X4405X1	DM	04	22	003-19	LCC	1	1	V71X4405X1	NULL	NULL	NULL	ON			GNS
LCC-3	V71X4407X1	DM	04	23	003-20	LCC	1	1	V71X4407X1	NULL	NULL	NULL	ON			GNS
LCC-3	V72X4560X1	DM	04	24	003-21	LCC	1	1	V72X4560X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X0030X1	DM	04	25	003-22	LCC	1	1	V95X0030X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X1030X1	DM	04	26	003-23	LCC	1	1	V95X1030X1	NULL	NULL	NULL	OFF			GNS



LCC TABLE & ROW ASSIGNMENTS

LCC	FD	TYPE	T#	R#	SFO	1ST	X	Y	FD1	FD2	FD3	FD4	LO	HI	UNIT	RSYS
LCC-3	V95X2030X1	DM	04	27	003-24	LCC	1	1	V95X2030X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V71X2404X1	DM	04	28	003-25	LCC	1	1	V71X2404X1	NULL	NULL	NULL	ON			GNS
LCC-3	V71X2406X1	DM	04	29	003-26	LCC	1	1	V71X2406X1	NULL	NULL	NULL	ON			GNS
LCC-3	V71X3404X1	DM	04	30	003-27	LCC	1	1	V71X3404X1	NULL	NULL	NULL	ON			GNS
LCC-3	V71X3406X1	DM	04	31	003-28	LCC	1	1	V71X3406X1	NULL	NULL	NULL	ON			GNS
LCC-3	V71X4404X1	DM	04	32	003-29	LCC	1	1	V71X4404X1	NULL	NULL	NULL	ON			GNS
LCC-3	V71X4406X1	DM	04	33	003-30	LCC	1	1	V71X4406X1	NULL	NULL	NULL	ON			GNS
LCC-3	V95X0031X1	DM	04	34	003-31	LCC	1	1	V95X0031X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X1031X1	DM	04	35	003-32	LCC	1	1	V95X1031X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X2031X1	DM	04	36	003-33	LCC	1	1	V95X2031X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V79X1860X1	DM	04	37	004-00	LCC	1	1	V79X1860X1	NULL	NULL	NULL	ON			GNS
LCC-3	V79X1861X1	DM	04	38	004-01	LCC	1	1	V79X1861X1	NULL	NULL	NULL	ON			GNS
LCC-3	V79X1862X1	DM	04	39	004-02	LCC	1	1	V79X1862X1	NULL	NULL	NULL	ON			GNS
LCC-3	V79X1865X1	DM	04	40	004-03	LCC	1	1	V79X1865X1	NULL	NULL	NULL	ON			GNS
LCC-3	V79X1866X1	DM	04	41	004-04	LCC	1	1	V79X1866X1	NULL	NULL	NULL	ON			GNS
LCC-3	V79X1867X1	DM	04	42	004-05	LCC	1	1	V79X1867X1	NULL	NULL	NULL	ON			GNS
LCC-3	V79X1870X1	DM	04	43	004-06	LCC	1	1	V79X1870X1	NULL	NULL	NULL	ON			GNS
LCC-3	V79X1871X1	DM	04	44	004-07	LCC	1	1	V79X1871X1	NULL	NULL	NULL	ON			GNS
LCC-3	V79X1872X1	DM	04	45	004-08	LCC	1	1	V79X1872X1	NULL	NULL	NULL	ON			GNS
LCC-3	V79X1875X1	DM	04	46	004-09	LCC	1	1	V79X1875X1	NULL	NULL	NULL	ON			GNS
LCC-3	V79X1876X1	DM	04	47	004-10	LCC	1	1	V79X1876X1	NULL	NULL	NULL	ON			GNS
LCC-3	V79X1877X1	DM	04	48	004-11	LCC	1	1	V79X1877X1	NULL	NULL	NULL	ON			GNS
LCC-3	GWDPPT01A	AM	04	49	005-00	LCC	1	2	GWDPPT01A	GWDPPT02A	NULL	NULL	1200	1600	PSIG	KWATR
LCC-3	GWDPPT02A	AM	04	50	005-01	LCC	1	2	GWDPPT02A	GWDPPT01A	NULL	NULL	1200	1600	PSIG	KWATR
LCC-3	GWDXPT29E	DM	05	01	005-16	LCC	1	2	GWDXPT29E	GWDXPT53E	NULL	NULL	ON			KWATR
LCC-3	GWDXPT53E	DM	05	02	005-17	LCC	1	2	GWDXPT53E	GWDXPT29E	NULL	NULL	ON			KWATR
LCC-3	E41T1151A1	AM	05	03	007-00	LCC	1	2	E41T1151A1	GWDXPT53E	NULL	NULL	ON			SSME
LCC-3	E41T1152A1	AM	05	04	007-01	LCC	1	2	E41T1152A1	E41T1151A1	NULL	NULL	-160	NOHI	DEGF	SSME
LCC-3	E41T2151A1	AM	05	05	007-02	LCC	1	2	E41T2151A1	E41T1152A1	NULL	NULL	-160	NOHI	DEGF	SSME
LCC-3	F41T2152A1	AM	05	06	007-03	LCC	1	2	F41T2152A1	E41T2151A1	NULL	NULL	-160	NOHI	DEGF	SSME
LCC-3	E41T3151A1	AM	05	07	007-04	LCC	1	2	E41T3151A1	E41T2152A1	NULL	NULL	-160	NOHI	DEGF	SSME
LCC-3	E41T3152A1	AM	05	08	007-05	LCC	1	2	E41T3152A1	E41T3151A1	NULL	NULL	-160	NOHI	DEGF	SSME
LCC-3	E41T1153A1	AM	05	09	007-06	LCC	1	2	E41T1153A1	E41T3152A1	NULL	NULL	-250	NOHI	DEGF	SSME
LCC-3	E41T1154A1	AM	05	10	007-07	LCC	1	2	E41T1154A1	E41T1153A1	NULL	NULL	-250	NOHI	DEGF	SSME
LCC-3	E41T2153A1	AM	05	11	007-08	LCC	1	2	E41T2153A1	E41T1154A1	NULL	NULL	-250	NOHI	DEGF	SSME
LCC-3	E41T2154A1	AM	05	12	007-09	LCC	1	2	E41T2154A1	E41T2153A1	NULL	NULL	-250	NOHI	DEGF	SSME
LCC-3	E41T3153A1	AM	05	13	007-10	LCC	1	2	E41T3153A1	E41T2154A1	NULL	NULL	-250	NOHI	DEGF	SSME
LCC-3	E41T3154A1	AM	05	14	007-11	LCC	1	2	E41T3154A1	E41T3153A1	NULL	NULL	-250	NOHI	DEGF	SSME
LCC-3	V91X2242XX	DM	05	15	008-05	LCC	1	1	V91X2242XX	E41T3154A1	NULL	NULL	OFF			DPS
LCC-3	V91X2243XX	DM	05	16	008-06	LCC	1	1	V91X2243XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2244XX	DM	05	17	008-07	LCC	1	1	V91X2244XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2245XX	DM	05	18	008-08	LCC	1	1	V91X2245XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2246XX	DM	05	19	008-09	LCC	1	1	V91X2246XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2247XX	DM	05	20	008-10	LCC	1	1	V91X2247XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2248XX	DM	05	21	008-11	LCC	1	1	V91X2248XX	NULL	NULL	NULL	OFF			DPS

LCC TABLE & ROW ASSIGNMENTS

LCC	FD	TYPE	T#	R#	SEQ	1ST	X	Y	FD1	FD2	FD3	FD4	L0	HI	UNIT	RSYS
LCC-3	V91X2249XX	DM	05	22	008-12	LCC	1	1	V91X2249XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2253XX	DM	05	23	008-13	LCC	1	1	V91X2253XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2254XX	DM	05	24	008-14	LCC	1	1	V91X2254XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2255XX	DM	05	25	008-15	LCC	1	1	V91X2255XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2261XX	DM	05	26	008-16	LCC	1	1	V91X2261XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2262XX	DM	05	27	008-17	LCC	1	1	V91X2262XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2263XX	DM	05	28	008-18	LCC	1	1	V91X2263XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2264XX	DM	05	29	008-19	LCC	1	1	V91X2264XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2277XX	DM	05	30	008-20	2 OF 3	1	3	V91X2277XX	V91X2278XX	V91X2279XX	NULL	OFF			DPS
LCC-3	V91X2278XX	DM	05	31	008-21	2 OF 3	2	3	V91X2277XX	V91X2278XX	V91X2279XX	NULL	OFF			DPS
LCC-3	V91X2279XX	DM	05	32	008-22	2 OF 3	3	3	V91X2277XX	V91X2278XX	V91X2279XX	NULL	OFF			DPS
LCC-3	V91X2802XX	DM	05	33	008-23	LCC	1	1	V91X2802XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2803XX	DM	05	34	008-24	LCC	1	1	V91X2803XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2804XX	DM	05	35	008-25	LCC	1	1	V91X2804XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2805XX	DM	05	36	008-26	LCC	1	1	V91X2805XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2806XX	DM	05	37	008-27	LCC	1	1	V91X2806XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2807XX	DM	05	38	008-28	LCC	1	1	V91X2807XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2808XX	DM	05	39	008-29	LCC	1	1	V91X2808XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2809XX	DM	05	40	008-30	LCC	1	1	V91X2809XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2900XX	DM	05	41	008-31	LCC	1	1	V91X2900XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2901XX	DM	05	42	008-32	LCC	1	1	V91X2901XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2902XX	DM	05	43	008-33	1 OF 2	1	2	V91X2902XX	V91X2903XX	NULL	NULL	OFF			DPS
LCC-3	V91X2903XX	DM	05	44	008-34	1 OF 2	2	2	V91X2902XX	V91X2903XX	NULL	NULL	OFF			DPS
LCC-3	V91X2904XX	DM	05	45	008-35	LCC	1	1	V91X2904XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2905XX	DM	05	46	008-36	LCC	1	1	V91X2905XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2906XX	DM	05	47	008-37	LCC	1	1	V91X2906XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2907XX	DM	05	48	008-38	LCC	1	1	V91X2907XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2917XX	DM	05	49	008-39	LCC	1	1	V91X2917XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2918XX	DM	05	50	008-40	LCC	1	1	V91X2918XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2919XX	DM	06	01	008-41	LCC	1	1	V91X2919XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2920XX	DM	06	02	008-42	LCC	1	1	V91X2920XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2921XX	DM	06	03	008-43	LCC	1	1	V91X2921XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2922XX	DM	06	04	008-44	LCC	1	1	V91X2922XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2923XX	DM	06	05	008-45	LCC	1	1	V91X2923XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2924XX	DM	06	06	008-46	LCC	1	1	V91X2924XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2925XX	DM	06	07	008-47	LCC	1	1	V91X2925XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2926XX	DM	06	08	008-48	LCC	1	1	V91X2926XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2928XX	DM	06	09	008-49	LCC	1	1	V91X2928XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2931XX	DM	06	10	008-50	LCC	1	1	V91X2931XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2934XX	DM	06	11	008-51	LCC	1	1	V91X2934XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X1716XX	DM	06	12	008-52	LCC	1	1	V91X1716XX	NULL	NULL	NULL	ON			DPS
LCC-3	V91X1717XX	DM	06	13	008-53	LCC	1	1	V91X1717XX	NULL	NULL	NULL	ON			DPS
LCC-3	V91X1718XX	DM	06	14	008-54	LCC	1	1	V91X1718XX	NULL	NULL	NULL	ON			DPS
LCC-3	V91X1719XX	DM	06	15	008-55	LCC	1	1	V91X1719XX	NULL	NULL	NULL	ON			DPS
LCC-3	V91Q1710CX	DP	06	16	008-56	LCC	1	1	V91Q1710CX	NULL	NULL	NULL	8001	B010		DPS

LCC TABLE #, ROW ASSIGNMENTS

LCC	FD	TYPE	T#	R#	SEQ	1ST	X	Y	FD1	FD2	FD3	FD4	LO	HI	UNIT	RSYS
LCC-3	V91Q1711CX	DP	06	17	008-67	LCC	1	1	V91Q1711CX	NULL	NULL	NULL	B001	B010		DPS
LCC-3	V91Q1712CX	DP	06	18	008-64	LCC	1	1	V91Q1712CX	NULL	NULL	NULL	B001	B010		DPS
LCC-3	V91Q1713CX	DP	06	19	008-65	LCC	1	1	V91Q1713CX	NULL	NULL	NULL	B001	B010		DPS
LCC-3	V92X6722XX	DM	06	20	008-66	LCC	1	1	V92X6722XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V92X6781XX	DM	06	21	008-67	LCC	1	1	V92X6781XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V92X7368XX	DM	06	22	008-68	LCC	3	OF 4	V92X7368XX	V92X7428XX	V92X7488XX	V92X7548XX	ON			DPS
LCC-3	V92X7428XX	DM	06	23	008-69	LCC	3	OF 4	V92X7428XX	V92X7428XX	V92X7488XX	V92X7548XX	ON			DPS
LCC-3	V92X7488XX	DM	06	24	008-70	LCC	3	OF 4	V92X7488XX	V92X7428XX	V92X7488XX	V92X7548XX	ON			DPS
LCC-3	V92X7548XX	DM	06	25	008-71	LCC	3	OF 4	V92X7548XX	V92X7428XX	V92X7488XX	V92X7548XX	ON			DPS
LCC-3	V92X7369XX	DM	06	26	008-72	LCC	3	OF 4	V92X7369XX	V92X7429XX	V92X7489XX	V92X7549XX	ON			DPS
LCC-3	V92X7429XX	DM	06	27	008-73	LCC	3	OF 4	V92X7429XX	V92X7429XX	V92X7489XX	V92X7549XX	ON			DPS
LCC-3	V92X7489XX	DM	06	28	008-74	LCC	3	OF 4	V92X7489XX	V92X7429XX	V92X7489XX	V92X7549XX	ON			DPS
LCC-3	V92X7549XX	DM	06	29	008-75	LCC	3	OF 4	V92X7549XX	V92X7429XX	V92X7489XX	V92X7549XX	ON			DPS
LCC-3	V92X7366XX	DM	06	30	008-76	LCC	2	OF 4	V92X7366XX	V92X7426XX	V92X7486XX	V92X7546XX	OFF			DPS
LCC-3	V92X7426XX	DM	06	31	008-77	LCC	2	OF 4	V92X7426XX	V92X7426XX	V92X7486XX	V92X7546XX	OFF			DPS
LCC-3	V92X7486XX	DM	06	32	008-78	LCC	2	OF 4	V92X7486XX	V92X7426XX	V92X7486XX	V92X7546XX	OFF			DPS
LCC-3	V92X7546XX	DM	06	33	008-79	LCC	2	OF 4	V92X7546XX	V92X7426XX	V92X7486XX	V92X7546XX	OFF			DPS
LCC-3	V92X7367XX	DM	06	34	008-80	LCC	2	OF 4	V92X7367XX	V92X7427XX	V92X7487XX	V92X7547XX	OFF			DPS
LCC-3	V92X7427XX	DM	06	35	008-81	LCC	2	OF 4	V92X7427XX	V92X7427XX	V92X7487XX	V92X7547XX	OFF			DPS
LCC-3	V92X7487XX	DM	06	36	008-82	LCC	2	OF 4	V92X7487XX	V92X7427XX	V92X7487XX	V92X7547XX	OFF			DPS
LCC-3	V92X7547XX	DM	06	37	008-83	LCC	2	OF 4	V92X7547XX	V92X7427XX	V92X7487XX	V92X7547XX	OFF			DPS
LCC-3	B76V1600H	AM	06	38	009-00	LCC	1	OF 2	B76V1600H	B76V1600C1	NULL	NULL	24.8	32.0	V	BELE
LCC-3	B76V1600C1	AM	06	39	009-01	LCC	1	OF 2	B76V1600C1	B76V1600C1	NULL	NULL	25.5	31.3	V	BELE
LCC-3	B76V2600H	AM	06	40	009-02	LCC	1	OF 2	B76V2600H	B76V2600C1	NULL	NULL	24.8	32.0	V	BELE
LCC-3	B76V2600C1	AM	06	41	009-03	LCC	1	OF 2	B76V2600C1	B76V2600C1	NULL	NULL	25.5	31.3	V	BELE
LCC-3	B76V1601H	AM	06	42	009-04	LCC	1	OF 2	B76V1601H	B76V1601C1	NULL	NULL	24.8	32.0	V	BELE
LCC-3	B76V1601C1	AM	06	43	009-05	LCC	1	OF 2	B76V1601C1	B76V1601C1	NULL	NULL	25.5	31.3	V	BELE
LCC-3	B76V2601H	AM	06	44	009-06	LCC	1	OF 2	B76V2601H	B76V2601C1	NULL	NULL	24.8	32.0	V	BELE
LCC-3	B76V2601C1	AM	06	45	009-07	LCC	1	OF 2	B76V2601C1	B76V2601C1	NULL	NULL	25.5	31.3	V	BELE
LCC-3	B55V2605C1	AM	06	46	009-08	LCC	1		B55V2605C1	NULL	NULL	NULL	N0L0	1.5	V	BPYR
LCC-3	B55V1606C1	AM	06	47	009-09	LCC	1		B55V1606C1	NULL	NULL	NULL	N0L0	1.5	V	BPYR
LCC-3	B55V2606C1	AM	06	48	009-10	LCC	1		B55V2606C1	NULL	NULL	NULL	N0L0	1.5	V	BPYR
LCC-3	B55V1607C1	AM	06	49	009-11	LCC	1		B55V1607C1	NULL	NULL	NULL	N0L0	1.5	V	BPYR
LCC-3	B55V2607C1	AM	06	50	009-12	LCC	1		B55V2607C1	NULL	NULL	NULL	N0L0	1.5	V	BPYR
LCC-3	B55V1608C1	AM	07	01	009-13	LCC	1		B55V1608C1	NULL	NULL	NULL	N0L0	1.5	V	BPYR
LCC-3	B55V1609C1	AM	07	02	009-14	LCC	1		B55V1609C1	NULL	NULL	NULL	N0L0	1.5	V	BPYR
LCC-3	B55V2609C1	AM	07	03	009-15	LCC	1		B55V2609C1	NULL	NULL	NULL	N0L0	1.5	V	BPYR
LCC-3	B55V2610C1	AM	07	04	009-16	LCC	1		B55V2610C1	NULL	NULL	NULL	N0L0	1.5	V	BPYR
LCC-3	B55V1611C1	AM	07	05	009-17	LCC	1		B55V1611C1	NULL	NULL	NULL	N0L0	1.5	V	BPYR
LCC-3	B55V2611C1	AM	07	06	009-18	LCC	1		B55V2611C1	NULL	NULL	NULL	N0L0	1.5	V	BPYR
LCC-3	B55V1612C1	AM	07	07	009-19	LCC	1		B55V1612C1	NULL	NULL	NULL	N0L0	1.5	V	BPYR
LCC-3	B55V2612C1	AM	07	08	009-20	LCC	1		B55V2612C1	NULL	NULL	NULL	N0L0	1.5	V	BPYR
LCC-3	B55V1613C1	AM	07	09	009-21	LCC	1		B55V1613C1	NULL	NULL	NULL	N0L0	1.5	V	BPYR
LCC-3	B55V2614C1	AM	07	10	009-22	LCC	1		B55V2614C1	NULL	NULL	NULL	N0L0	1.5	V	BPYR
LCC-3	B55V1614C1	AM	07	11	009-23	LCC	1		B55V1614C1	NULL	NULL	NULL	N0L0	1.5	V	BPYR

LCC TABLE & ROW ASSIGNMENTS

LCC	FD	TYPE	#	R#	SFO	1ST	X	Y	FD1	FD2	FD3	FD4	LO	HI	UNIT	RSYS
LCC-3	R55V1615C1	AM	07	12	000-24	LCC	1	1	R55V1615C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V2615C1	AM	07	13	000-25	LCC	1	1	R55V2615C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V1616C1	AM	07	14	000-26	LCC	1	1	R55V1616C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V2616C1	AM	07	15	000-27	LCC	1	1	R55V2616C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V1617C1	AM	07	16	000-28	LCC	1	1	R55V1617C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V2617C1	AM	07	17	000-29	LCC	1	1	R55V2617C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V1618C1	AM	07	18	000-30	LCC	1	1	R55V1618C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V2618C1	AM	07	19	000-31	LCC	1	1	R55V2618C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V1620C1	AM	07	20	000-32	LCC	1	1	R55V1620C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V2620C1	AM	07	21	000-33	LCC	1	1	R55V2620C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V1619C1	AM	07	22	000-34	LCC	1	1	R55V1619C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V2619C1	AM	07	23	000-35	LCC	1	1	R55V2619C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	V76V1500A1	AM	07	24	010-01	LCC	1	1	V76V1500A1	NULL	NULL	NULL	115	120	VAC	EPDC
LCC-3	V76V1501A1	AM	07	25	010-03	LCC	1	1	V76V1501A1	NULL	NULL	NULL	115	120	VAC	EPDC
LCC-3	V76V1502A1	AM	07	26	010-05	LCC	1	1	V76V1502A1	NULL	NULL	NULL	115	120	VAC	EPDC
LCC-3	V76V1600A1	AM	07	27	010-07	LCC	1	1	V76V1600A1	NULL	NULL	NULL	115	120	VAC	EPDC
LCC-3	V76V1601A1	AM	07	28	010-09	LCC	1	1	V76V1601A1	NULL	NULL	NULL	115	120	VAC	EPDC
LCC-3	V76V1602A1	AM	07	29	010-11	LCC	1	1	V76V1602A1	NULL	NULL	NULL	115	120	VAC	EPDC
LCC-3	V76V1700A1	AM	07	30	010-13	LCC	1	1	V76V1700A1	NULL	NULL	NULL	115	120	VAC	EPDC
LCC-3	V76V1701A1	AM	07	31	010-15	LCC	1	1	V76V1701A1	NULL	NULL	NULL	115	120	VAC	EPDC
LCC-3	V76V1702A1	AM	07	32	010-17	LCC	1	1	V76V1702A1	NULL	NULL	NULL	115	120	VAC	EPDC
LCC-3	V76V0100A1	AM	07	33	010-18	1 OF 2	1	2	V76V0100A1	V45V0100A1	NULL	NULL	NOL0	32.0	V	FCP
LCC-3	V45V0100A1	AM	07	34	010-19	1 OF 2	2	2	V76V0100A1	V45V0100A1	NULL	NULL	NOL0	32.0	V	FCP
LCC-3	V76V0200A1	AM	07	35	010-20	1 OF 2	1	2	V76V0200A1	V45V0200A1	NULL	NULL	NOL0	32.0	V	FCP
LCC-3	V45V0200A1	AM	07	36	010-21	1 OF 2	2	2	V76V0200A1	V45V0200A1	NULL	NULL	NOL0	32.0	V	FCP
LCC-3	V76V0300A1	AM	07	37	010-22	1 OF 2	1	2	V76V0300A1	V45V0300A1	NULL	NULL	NOL0	32.0	V	FCP
LCC-3	V45V0300A1	AM	07	38	010-23	1 OF 2	2	2	V76V0300A1	V45V0300A1	NULL	NULL	NOL0	32.0	V	FCP
LCC-3	V76X6775E1	DM	07	39	010-24	LCC	1	1	V76X6775E1	NULL	NULL	NULL	OFF			EPDC
LCC-3	V76X6776E1	DM	07	40	010-25	LCC	1	1	V76X6776E1	NULL	NULL	NULL	OFF			EPDC
LCC-3	V76X6777E1	DM	07	41	010-26	LCC	1	1	V76X6777E1	NULL	NULL	NULL	OFF			EPDC
LCC-3	V76X6778E1	DM	07	42	010-27	LCC	1	1	V76X6778E1	NULL	NULL	NULL	OFF			EPDC
LCC-3	V76V3092A1	AM	07	43	010-28	1 OF 2	1	2	V76V3092A1	V76V3093A1	NULL	NULL	26.5	32.0	V	EPDC
LCC-3	V76V3093A1	AM	07	44	010-29	1 OF 2	2	2	V76V3092A1	V76V3093A1	NULL	NULL	26.5	32.0	V	EPDC
LCC-3	V76S0163E1	DM	07	45	010-48	2 OF 3	1	3	V76S0163E1	V76X0236E1	V76X0335E1	NULL	ON			EPDC
LCC-3	V76X0236E1	DM	07	46	010-49	2 OF 3	2	3	V76S0163E1	V76X0236E1	V76X0335E1	NULL	ON			EPDC
LCC-3	V76X0335E1	DM	07	47	010-50	2 OF 3	3	3	V76S0163E1	V76X0236E1	V76X0335E1	NULL	ON			EPDC
LCC-3	V76S0263E1	DM	07	48	010-51	2 OF 3	1	3	V76S0263E1	V76X0336E1	V76X0136E1	NULL	ON			EPDC
LCC-3	V76X0336E1	DM	07	49	010-52	2 OF 3	2	3	V76S0263E1	V76X0336E1	V76X0136E1	NULL	ON			EPDC
LCC-3	V76X0136E1	DM	07	50	010-53	2 OF 3	3	3	V76S0263E1	V76X0336E1	V76X0136E1	NULL	ON			EPDC
LCC-3	V76S0363E1	DM	08	01	010-54	2 OF 3	1	3	V76S0363E1	V76X0135E1	V76X0235E1	NULL	ON			EPDC
LCC-3	V76X0135E1	DM	08	02	010-55	2 OF 3	2	3	V76S0363E1	V76X0135E1	V76X0235E1	NULL	ON			EPDC
LCC-3	V76X0235E1	DM	08	03	010-56	2 OF 3	3	3	V76S0363E1	V76X0135E1	V76X0235E1	NULL	ON			EPDC
LCC-3	V74X5176E1	DM	08	04	011-00	1 OF 2	1	2	V74X5176E1	V74X5177E1	NULL	NULL	ON			COMM
LCC-3	V74X5177E1	DM	08	05	011-01	1 OF 2	2	2	V74X5176E1	V74X5177E1	NULL	NULL	ON			COMM
LCC-3	V74X5052E1	DM	08	06	011-02	1 OF 3	1	3	V74X5052E1	V74X4730E1	V74X4731E1	NULL	ON			COMM

LCC TABLE & ROW ASSIGNMENTS

LCC	FD	TYPE	#	R#	SEQ	1ST	X	Y	FD1	FD2	FD3	FD4	LO	HI	UNIT	RSYS	
LCC-3	V74X4730E1	DM	08	07	011-07	1	OF	3	2	3	V74X5052E1	V74X4730E1	V74X4731E1	NULL	ON	COMM	
LCC-3	V74X4731E1	DM	08	08	011-04	1	OF	3	3	3	V74X5052E1	V74X4730E1	V74X4731E1	NULL	ON	COMM	
LCC-3	V75X2121D1	DM	08	09	012-00	LCC	1	1	1	1	V75X2121D1	NULL	NULL	NULL	ON	INST	
LCC-3	V75X2122D1	DM	08	10	012-01	LCC	1	1	1	1	V75X2122D1	NULL	NULL	NULL	ON	INST	
LCC-3	V75X2123D1	DM	08	11	012-02	LCC	1	1	1	1	V75X2123D1	NULL	NULL	NULL	ON	INST	
LCC-3	V75X2124D1	DM	08	12	012-03	LCC	1	1	1	1	V75X2124D1	NULL	NULL	NULL	ON	INST	
LCC-3	V75X2125D1	DM	08	13	012-04	LCC	1	1	1	1	V75X2125D1	NULL	NULL	NULL	ON	INST	
LCC-3	V75X2126D1	DM	08	14	012-05	LCC	1	1	1	1	V75X2126D1	NULL	NULL	NULL	ON	INST	
LCC-3	V75X2127D1	DM	08	15	012-06	LCC	1	1	1	1	V75X2127D1	NULL	NULL	NULL	ON	INST	
LCC-3	V75X2128D1	DM	08	16	012-07	LCC	1	1	1	1	V75X2128D1	NULL	NULL	NULL	ON	INST	
LCC-3	V75X2130D1	DM	08	17	012-08	LCC	1	1	1	1	V75X2130D1	NULL	NULL	NULL	ON	INST	
LCC-3	V75X2131D1	DM	08	18	012-09	LCC	1	1	1	1	V75X2131D1	NULL	NULL	NULL	ON	INST	
LCC-3	V75X2132D1	DM	08	19	012-10	LCC	1	1	1	1	V75X2132D1	NULL	NULL	NULL	ON	INST	
LCC-3	V75X2133D1	DM	08	20	012-11	LCC	1	1	1	1	V75X2133D1	NULL	NULL	NULL	ON	INST	
LCC-3	V75X2134D1	DM	08	21	012-12	LCC	1	1	1	1	V75X2134D1	NULL	NULL	NULL	ON	INST	
LCC-3	V61P2556A1	AM	08	23	013-03	LCC	1	1	1	1	V61P2556A1	NULL	NULL	4.2	6.8	INH20	ECLS
LCC-3	V61P2600A1	AM	08	24	013-04	1	OF	3	1	3	V61P2600A1	V61R2742A1	V61P2605A1	NULL	55	PSIA	ECLS
LCC-3	V61P2742A1	AM	08	25	013-05	1	OF	3	2	3	V61P2742A1	V61R2742A1	V61P2605A1	NULL	667	LBM/HR	ECLS
LCC-3	V61P2605A1	AM	08	26	013-06	1	OF	3	3	3	V61P2600A1	V61R2742A1	V61P2605A1	NULL	33	PSID	ECLS
LCC-3	V61P2700A1	AM	08	27	013-07	1	OF	3	1	3	V61P2700A1	V61R2722A1	V61P2705A1	NULL	55	PSIA	ECLS
LCC-3	V61P2722A1	AM	08	28	013-08	1	OF	3	2	3	V61P2700A1	V61R2722A1	V61P2705A1	NULL	667	LBM/HR	ECLS
LCC-3	V61P2705A1	AM	08	29	013-09	1	OF	3	3	3	V61P2700A1	V61R2722A1	V61P2705A1	NULL	33	PSID	ECLS
LCC-3	V61P2642A1	AM	08	30	013-10	LCC	1	1	1	1	V61P2642A1	NULL	NULL	1.46	4.00	INH20	ECLS
LCC-3	V61P2647A1	AM	08	31	013-11	LCC	1	1	1	1	V61P2647A1	NULL	NULL	1.46	4.00	INH20	ECLS
LCC-3	V61P2658A1	AM	08	32	013-12	LCC	1	1	1	1	V61P2658A1	NULL	NULL	2.16	4.50	INH20	ECLS
LCC-3	V61X2861E1	DM	08	33	013-13	3	OF	3	1	3	V61X2861E1	V61X2860E1	V61X2862E1	NULL	ON	ECLS	ECLS
LCC-3	V61X2860E1	DM	08	34	013-14	3	OF	3	2	3	V61X2861E1	V61X2860E1	V61X2862E1	NULL	OFF	ECLS	ECLS
LCC-3	V61X2862E1	DM	08	35	013-15	3	OF	3	3	3	V61X2861E1	V61X2860E1	V61X2862E1	NULL	OFF	ECLS	ECLS
LCC-3	V61P2869A1	AM	08	36	013-16	LCC	1	1	1	1	V61P2869A1	NULL	NULL	3	5	INH20	ECLS
LCC-3	V62X0596E1	DM	08	37	013-17	LCC	1	1	1	1	V62X0596E1	NULL	NULL	OFF	OFF	ECLS	ECLS
LCC-3	V62X0606E1	DM	08	38	013-18	LCC	1	1	1	1	V62X0606E1	NULL	NULL	OFF	OFF	ECLS	ECLS
LCC-3	V62X0607E1	DM	08	39	013-19	LCC	1	1	1	1	V62X0607E1	NULL	NULL	OFF	OFF	ECLS	ECLS
LCC-3	V62X0610E1	DM	08	40	013-20	LCC	1	1	1	1	V62X0610E1	NULL	NULL	OFF	OFF	ECLS	ECLS
LCC-3	V62X0611E1	DM	08	41	013-21	LCC	1	1	1	1	V62X0611E1	NULL	NULL	OFF	OFF	ECLS	ECLS
LCC-3	V62X0612E1	DM	08	42	013-22	LCC	1	1	1	1	V62X0612E1	NULL	NULL	OFF	OFF	ECLS	ECLS
LCC-3	V62X0620E1	DM	08	43	013-23	LCC	1	1	1	1	V62X0620E1	NULL	NULL	OFF	OFF	ECLS	ECLS
LCC-3	V62X0621E1	DM	08	44	013-24	LCC	1	1	1	1	V62X0621E1	NULL	NULL	OFF	OFF	ECLS	ECLS
LCC-3	V62X0622E1	DM	08	45	013-25	LCC	1	1	1	1	V62X0622E1	NULL	NULL	OFF	OFF	ECLS	ECLS
LCC-3	V62X0630E1	DM	08	46	013-26	LCC	1	1	1	1	V62X0630E1	NULL	NULL	OFF	OFF	ECLS	ECLS
LCC-3	V62X0631E1	DM	08	47	013-27	LCC	1	1	1	1	V62X0631E1	NULL	NULL	OFF	OFF	ECLS	ECLS
LCC-3	V62X0632E1	DM	08	48	013-28	LCC	1	1	1	1	V62X0632E1	NULL	NULL	OFF	OFF	ECLS	ECLS
LCC-3	V63R1100A1	AM	09	01	013-29	2	OF	3	1	3	V63R1100A1	V63R1103A1	V63R1105A1	2150	NOHI	LBM/HR	ECLS
LCC-3	V63R1103A1	AM	09	02	013-30	2	OF	3	2	3	V63R1100A1	V63R1103A1	V63R1105A1	190	NOHI	LBM/HR	ECLS
LCC-3	V63R1105A1	AM	09	03	013-31	2	OF	3	3	3	V63R1100A1	V63R1103A1	V63R1105A1	265	NOHI	LBM/HR	ECLS
LCC-3	V63P1108A1	AM	09	04	013-32	1	OF	2	1	2	V63P1108A1	V63Q1130A1	NULL	92	117	PSIA	ECLS

LCC TABLE 9. ROW ASSIGNMENTS

LCC	FD	TYPE	T#	R#	SEC	1ST	X	Y	FD1	FD2	FD3	FD4	LO	HI	UNIT	RSYS	
LCC-3	V63Q1130A1	AM	09	05	013-41	1	0F	2	2	V63P1103A1	V63Q1130A1	NULL	NULL	23	39	PCT	ECLS
LCC-3	V63T1207A1	AM	09	06	013-46	1	0F	2	1	V63T1207A1	V63T1407A1	NULL	NULL	30	50	DEGF	ECLS
LCC-3	V63T1407A1	AM	09	07	013-47	1	0F	2	2	V63T1207A1	V63T1407A1	NULL	NULL	30	50	DEGF	ECLS
LCC-3	V63R1300A1	AM	09	08	013-48	2	0F	3	1	V63R1300A1	V63R1303A1	V63R1305A1	NULL	2150	NOHI	LBM/HR	ECLS
LCC-3	V63R1303A1	AM	09	09	013-49	2	0F	3	2	V63R1300A1	V63R1303A1	V63R1305A1	NULL	190	NOHI	LBM/HR	ECLS
LCC-3	V63R1305A1	AM	09	10	013-50	2	0F	3	3	V63R1300A1	V63R1303A1	V63R1305A1	NULL	265	NOHI	LBM/HR	ECLS
LCC-3	V63P1308A1	AM	09	11	013-51	1	0F	2	1	V63P1308A1	V63Q1330A1	NULL	NULL	77	100	PSIA	ECLS
LCC-3	V63Q1330A1	AM	09	12	013-52	1	0F	2	2	V63P1308A1	V63Q1330A1	NULL	NULL	23	39	PCT	ECLS
LCC-3	GCEP2400A	AM	09	13	014-00	1	0F	2	1	GCEP2400A	GCEP4401A	NULL	NULL	30	86	INH20	KPVD
LCC-3	GCEP4401A	AM	09	14	014-01	1	0F	2	2	GCEP2400A	GCEP4401A	NULL	NULL	35	96	INH20	KPVD
LCC-3	GCEP2200A	AM	09	15	014-02	1	0F	2	1	GCEP2200A	GCEP4201A	NULL	NULL	20	86	INH20	KPVD
LCC-3	GCEP4201A	AM	09	16	014-03	1	0F	2	2	GCEP2200A	GCEP4201A	NULL	NULL	24	96	INH20	KPVD
LCC-3	GCEP2300A	AM	09	17	014-04	1	0F	2	1	GCEP2300A	GCEP4301A	NULL	NULL	24	86	INH20	KPVD
LCC-3	GCEP4301A	AM	09	18	014-05	1	0F	2	2	GCEP2300A	GCEP4301A	NULL	NULL	31	110	INH20	KPVD
LCC-3	V58Q0102A1	AM	09	19	015-00	LCC		1		V58Q0102A1	NULL	NULL	NULL	40	100	PCT	HYD
LCC-3	V58Q0202A1	AM	09	20	015-01	LCC		1		V58Q0202A1	NULL	NULL	NULL	40	100	PCT	HYD
LCC-3	V58Q0302A1	AM	09	21	015-02	LCC		1		V58Q0302A1	NULL	NULL	NULL	40	100	PCT	HYD
LCC-3	V46P0190A1	AM	09	22	016-06	1	0F	2	1	V46P0190A1	V46P0191A1	NULL	NULL	N0L0	24	PSIA	APU
LCC-3	V46P0191A1	AM	09	23	016-07	1	0F	2	2	V46P0190A1	V46P0191A1	NULL	NULL	N0L0	24	PSIA	APU
LCC-3	V46P0290A1	AM	09	24	016-08	1	0F	2	1	V46P0290A1	V46P0291A1	NULL	NULL	N0L0	24	PSIA	APU
LCC-3	V46P0291A1	AM	09	25	016-09	1	0F	2	2	V46P0290A1	V46P0291A1	NULL	NULL	N0L0	24	PSIA	APU
LCC-3	V46P0390A1	AM	09	26	016-10	1	0F	2	1	V46P0390A1	V46P0391A1	NULL	NULL	N0L0	24	PSIA	APU
LCC-3	V46P0391A1	AM	09	27	016-11	1	0F	2	2	V46P0390A1	V46P0391A1	NULL	NULL	N0L0	24	PSIA	APU
LCC-3	V46P0152A1	AM	09	28	016-12	LCC		1		V46P0152A1	NULL	NULL	NULL	115	NOHI	PSIA	APU
LCC-3	V46P0252A1	AM	09	29	016-13	LCC		1		V46P0252A1	NULL	NULL	NULL	115	NOHI	PSIA	APU
LCC-3	V46P0352A1	AM	09	30	016-14	LCC		1		V46P0352A1	NULL	NULL	NULL	115	NOHI	PSIA	APU
LCC-4	V72X7011E1	DM	10	31	008-00	LCC		1		V72X7011E1	NULL	NULL	NULL	OFF	NOHI	PSIA	APU
LCC-4	V72X7012E1	DM	10	32	008-01	LCC		1		V72X7012E1	NULL	NULL	NULL	OFF	NOHI	PSIA	APU
LCC-4	V72X7013E1	DM	10	33	008-02	LCC		1		V72X7013E1	NULL	NULL	NULL	OFF	NOHI	PSIA	APU
LCC-4	V72X7014E1	DM	10	34	008-03	LCC		1		V72X7014E1	NULL	NULL	NULL	OFF	NOHI	PSIA	APU
LCC-4	V72X7015E1	DM	10	35	008-04	LCC		1		V72X7015E1	NULL	NULL	NULL	OFF	NOHI	PSIA	APU
LCC-4	V91X2831XX	DM	10	36	008-31	LCC		1		V91X2831XX	NULL	NULL	NULL	OFF	NOHI	PSIA	APU
LCC-4	V91X2833XX	DM	10	37	008-32	LCC		1		V91X2833XX	NULL	NULL	NULL	OFF	NOHI	PSIA	APU
LCC-4	V91X2835XX	DM	10	38	008-33	LCC		1		V91X2835XX	NULL	NULL	NULL	OFF	NOHI	PSIA	APU
LCC-4	V91X2837XX	DM	10	39	008-34	LCC		1		V91X2837XX	NULL	NULL	NULL	OFF	NOHI	PSIA	APU
LCC-4	V76X0125E1	DM	10	40	010-32	2	0F	3	1	V76X0125E1	V76X0225E1	V76X0325E1	NULL	ON		EPDC	EPDC
LCC-4	V76X0225E1	DM	10	41	010-33	2	0F	3	2	V76X0125E1	V76X0225E1	V76X0325E1	NULL	ON		EPDC	EPDC
LCC-4	V76X0325E1	DM	10	42	010-34	2	0F	3	3	V76X0125E1	V76X0225E1	V76X0325E1	NULL	ON		EPDC	EPDC
LCC-4	V76X0126E1	DM	10	43	010-35	2	0F	3	1	V76X0126E1	V76X0226E1	V76X0326E1	NULL	ON		EPDC	EPDC
LCC-4	V76X0226E1	DM	10	44	010-36	2	0F	3	2	V76X0126E1	V76X0226E1	V76X0326E1	NULL	ON		EPDC	EPDC
LCC-4	V76X0326E1	DM	10	45	010-37	2	0F	3	3	V76X0126E1	V76X0226E1	V76X0326E1	NULL	ON		EPDC	EPDC
LCC-4	V76X0224E1	DM	10	46	010-38	2	0F	3	1	V76X0224E1	V76X0324E1	V76X0124E1	NULL	ON		EPDC	EPDC
LCC-4	V76X0324E1	DM	10	47	010-39	2	0F	3	2	V76X0224E1	V76X0324E1	V76X0124E1	NULL	ON		EPDC	EPDC
LCC-4	V76X0124E1	DM	10	48	010-40	2	0F	3	3	V76X0224E1	V76X0324E1	V76X0124E1	NULL	ON		EPDC	EPDC
LCC-4	P55V1623C1	AM	10	49	019-00	LCC		1		P55V1623C1	NULL	NULL	NULL	N0L0	1.5	V	BRS

LCC TABLE & ROW ASSIGNMENTS

LCC	FD	TYPE	T#	P#	SEQ	1ST	X	Y	FD1	FD2	FD3	FD4	LO	HI	UNIT	RSYS
LCC-4	B55V1624C1	AM	10	50	019-01	LCC	1	1	B55V1624C1	NULL	NULL	NULL	NOLO	1.5	V	BRS
LCC-4	B55V2623C1	AM	11	01	019-02	LCC	1	1	B55V2623C1	NULL	NULL	NULL	NOLO	1.5	V	BRS
LCC-4	B55V2624C1	AM	11	02	019-03	LCC	1	1	B55V2624C1	NULL	NULL	NULL	NOLO	1.5	V	BRS
LCC-4	T55V1730A1	AM	11	03	019-04	LCC	1	1	T55V1730A1	NULL	NULL	NULL	NOLO	1.5	V	TRS
LCC-4	T55V1731A1	AM	11	04	019-05	LCC	1	1	T55V1731A1	NULL	NULL	NULL	NOLO	1.5	V	TRS







LCC TABLE 9 ROW ASSIGNMENTS

LCC	FD	TYPE	T#	R#	SEQ	1ST	X	Y	FD1	FD2	FD3	FD4	L0	HI	UNIT	RSYS
LCC-3	R46X1851X1	DM	03	42	002-01	1	0F	2	2	R46X1853X1	R46X1851X1	NULL	NULL	OFF		BHYD
LCC-3	R46X1852X1	DM	03	44	002-03	1	0F	2	2	R46X1854X1	R46X1852X1	NULL	NULL	OFF		BHYD
LCC-3	R46X1853X1	DM	03	41	002-00	1	0F	2	1	R46X1853X1	R46X1851X1	NULL	NULL	ON		BHYD
LCC-3	R46X1854X1	DM	03	43	002-02	1	0F	2	1	R46X1854X1	R46X1852X1	NULL	NULL	ON		BHYD
LCC-3	R46X1861X1	DM	03	50	002-00	LCC	1	1	R46X1861X1	NULL	NULL	NULL	NULL	ON		BHYD
LCC-3	R46X1863X1	DM	04	01	002-10	LCC	1	1	R46X1863X1	NULL	NULL	NULL	NULL	ON		BHYD
LCC-3	R46X2851X1	DM	03	46	002-05	1	0F	2	2	R46X2853X1	R46X2851X1	NULL	NULL	OFF		BHYD
LCC-3	R46X2852X1	DM	03	48	002-07	1	0F	2	2	R46X2854X1	R46X2852X1	NULL	NULL	OFF		BHYD
LCC-3	R46X2853X1	DM	03	45	002-04	1	0F	2	1	R46X2853X1	R46X2851X1	NULL	NULL	ON		BHYD
LCC-3	R46X2854X1	DM	03	47	002-06	1	0F	2	1	R46X2854X1	R46X2852X1	NULL	NULL	ON		BHYD
LCC-3	R46X2861X1	DM	04	02	002-11	LCC	1	1	R46X2861X1	NULL	NULL	NULL	NULL	ON		RHYD
LCC-3	R46X2863X1	DM	03	49	002-08	LCC	1	1	R46X2863X1	NULL	NULL	NULL	NULL	ON		BHYD
LCC-3	R55V1606C1	AM	06	47	009-00	LCC	1	1	R55V1606C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V1607C1	AM	06	49	009-11	LCC	1	1	R55V1607C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V1608C1	AM	07	01	009-13	LCC	1	1	R55V1608C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V1609C1	AM	07	02	009-14	LCC	1	1	R55V1609C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V1611C1	AM	07	05	009-17	LCC	1	1	R55V1611C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V1612C1	AM	07	07	009-19	LCC	1	1	R55V1612C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V1613C1	AM	07	09	009-21	LCC	1	1	R55V1613C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V1614C1	AM	07	10	009-22	LCC	1	1	R55V1614C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V1615C1	AM	07	12	009-24	LCC	1	1	R55V1615C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V1616C1	AM	07	14	009-26	LCC	1	1	R55V1616C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V1617C1	AM	07	16	009-28	LCC	1	1	R55V1617C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V1618C1	AM	07	18	009-30	LCC	1	1	R55V1618C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V1619C1	AM	07	22	009-34	LCC	1	1	R55V1619C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V1620C1	AM	07	20	009-32	LCC	1	1	R55V1620C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-4	R55V1623C1	AM	10	49	019-00	LCC	1	1	R55V1623C1	NULL	NULL	NULL	NOL0	1.5	V	BRS
LCC-4	R55V1624C1	AM	10	50	019-01	LCC	1	1	R55V1624C1	NULL	NULL	NULL	NOL0	1.5	V	BRS
LCC-3	R55V2605C1	AM	06	46	009-08	LCC	1	1	R55V2605C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V2606C1	AM	06	48	009-10	LCC	1	1	R55V2606C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V2607C1	AM	06	50	009-12	LCC	1	1	R55V2607C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V2609C1	AM	07	03	009-15	LCC	1	1	R55V2609C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V2610C1	AM	07	04	009-16	LCC	1	1	R55V2610C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V2611C1	AM	07	06	009-18	LCC	1	1	R55V2611C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V2612C1	AM	07	08	009-20	LCC	1	1	R55V2612C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V2614C1	AM	07	11	009-23	LCC	1	1	R55V2614C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V2615C1	AM	07	13	009-25	LCC	1	1	R55V2615C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V2616C1	AM	07	15	009-27	LCC	1	1	R55V2616C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V2617C1	AM	07	17	009-29	LCC	1	1	R55V2617C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V2618C1	AM	07	19	009-31	LCC	1	1	R55V2618C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V2619C1	AM	07	23	009-35	LCC	1	1	R55V2619C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-3	R55V2620C1	AM	07	21	009-33	LCC	1	1	R55V2620C1	NULL	NULL	NULL	NOL0	1.5	V	BPYR
LCC-4	R55V2623C1	AM	11	01	019-02	LCC	1	1	R55V2623C1	NULL	NULL	NULL	NOL0	1.5	V	BRS
LCC-4	R55V2624C1	AM	11	02	019-03	LCC	1	1	R55V2624C1	NULL	NULL	NULL	NOL0	1.5	V	BRS
LCC-3	R76V1600C1	AM	06	39	009-01	1	0F	2	2	B76V1600H	B76V1600C1	NULL	25.5	31.3	V	BELE

LCC TABLE & ROW ASSIGNMENTS

LCC	FD	TYPE	T#	R#	SEC	1ST	X	Y	FD1	FD2	FD3	FD4	LO	HI	UNIT	RSYS	
LCC-3	R76V1600H	AM	06	38	000-00	1	0F	2	1	2	R76V1600H	R76V1600C1	NULL	24.8	32.0	V	BELE
LCC-3	R76V1601C1	AM	06	43	000-05	1	0F	2	2	2	R76V1601H	R76V1601C1	NULL	25.5	31.3	V	BELE
LCC-3	R76V1601H	AM	06	42	000-04	1	0F	2	1	2	R76V1601H	R76V1601C1	NULL	24.8	32.0	V	BELE
LCC-3	R76V2600C1	AM	06	41	000-03	1	0F	2	2	2	R76V2600H	R76V2600C1	NULL	25.5	31.3	V	BELE
LCC-3	R76V2600H	AM	06	40	000-02	1	0F	2	1	2	R76V2600H	R76V2600C1	NULL	24.8	32.0	V	BELE
LCC-3	R76V2601C1	AM	06	45	000-07	1	0F	2	2	2	R76V2601H	R76V2601C1	NULL	25.5	31.3	V	BELE
LCC-3	R76V2601H	AM	06	44	000-06	1	0F	2	1	2	R76V2601H	R76V2601C1	NULL	24.8	32.0	V	BELE
LCC-3	F41T1151A1	AM	05	03	007-00	1	0F	2	1	2	E41T1151A1	E41T1152A1	NULL	-160	NOHI	DEGF	SSME
LCC-3	F41T1152A1	AM	05	04	007-01	1	0F	2	2	2	E41T1151A1	E41T1152A1	NULL	-160	NOHI	DEGF	SSME
LCC-3	F41T1153A1	AM	05	09	007-06	1	0F	2	1	2	E41T1153A1	E41T1154A1	NULL	-250	NOHI	DEGF	SSME
LCC-3	F41T1154A1	AM	05	10	007-07	1	0F	2	2	2	E41T1153A1	E41T1154A1	NULL	-250	NOHI	DEGF	SSME
LCC-3	F41T2151A1	AM	05	05	007-02	1	0F	2	1	2	E41T2151A1	E41T2152A1	NULL	-160	NOHI	DEGF	SSME
LCC-3	F41T2152A1	AM	05	06	007-03	1	0F	2	2	2	E41T2151A1	E41T2152A1	NULL	-160	NOHI	DEGF	SSME
LCC-3	F41T2153A1	AM	05	11	007-08	1	0F	2	1	2	E41T2153A1	E41T2154A1	NULL	-250	NOHI	DEGF	SSME
LCC-3	F41T2154A1	AM	05	12	007-09	1	0F	2	2	2	E41T2153A1	E41T2154A1	NULL	-250	NOHI	DEGF	SSME
LCC-3	E41T3151A1	AM	05	07	007-04	1	0F	2	1	2	E41T3151A1	E41T3152A1	NULL	-160	NOHI	DEGF	SSME
LCC-3	E41T3152A1	AM	05	08	007-05	1	0F	2	2	2	E41T3151A1	E41T3152A1	NULL	-160	NOHI	DEGF	SSME
LCC-3	E41T3153A1	AM	05	13	007-10	1	0F	2	1	2	E41T3153A1	E41T3154A1	NULL	-250	NOHI	DEGF	SSME
LCC-3	E41T3154A1	AM	05	14	007-11	1	0F	2	2	2	E41T3153A1	E41T3154A1	NULL	-250	NOHI	DEGF	SSME
LCC-3	GEC2200A	AM	09	15	014-02	1	0F	2	1	2	GEC2200A	GFCP4201A	NULL	20	86	INH20	KPVD
LCC-3	GEC2300A	AM	09	17	014-04	1	0F	2	1	2	GEC2300A	GEC4301A	NULL	24	86	INH20	KPVD
LCC-3	GEC2400A	AM	09	13	014-00	1	0F	2	1	2	GEC2400A	GEC4401A	NULL	30	86	INH20	KPVD
LCC-3	GEC4201A	AM	09	16	014-03	1	0F	2	2	2	GEC2200A	GEC4201A	NULL	24	96	INH20	KPVD
LCC-3	GEC4301A	AM	09	18	014-05	1	0F	2	2	2	GEC2300A	GEC4301A	NULL	31	110	INH20	KPVD
LCC-3	GEC4401A	AM	09	14	014-01	1	0F	2	2	2	GEC2400A	GEC4401A	NULL	35	96	INH20	KPVD
LCC-1	GWDKPT30FR	DM	00	21	005-08	LCC				1	GWDKPT30FR	NULL	NULL	OFF			KWATR
LCC-1	GWDKPT32ER	DM	00	22	005-09	LCC				1	GWDKPT32ER	NULL	NULL	OFF			KWATR
LCC-3	GWDPT01A	AM	04	49	005-00	1	0F	2	1	2	GWDPT01A	GWDPT02A	NULL	1200	1600	PSIG	KWATR
LCC-3	GWDPT02A	AM	04	50	005-01	1	0F	2	2	2	GWDPT01A	GWDPT02A	NULL	1200	1600	PSIG	KWATR
LCC-1	GWDQPT83A	AM	00	27	005-14	1	0F	2	1	2	GWDQPT83A	GWDQPT84A	NULL	258.2	NOHI	FT	KWATR
LCC-1	GWDQPT84A	AM	00	28	005-15	1	0F	2	2	2	GWDQPT83A	GWDQPT84A	NULL	258.2	NOHI	FT	KWATR
LCC-3	GWDXT29E	DM	05	01	005-16	1	0F	2	1	2	GWDXT29E	GWDXT53E	NULL	ON			KWATR
LCC-1	GWDXT33E	DM	00	24	005-11	LCC				1	GWDXT33E	NULL	NULL	OFF			KWATR
LCC-1	GWDXT42E	DM	00	25	005-12	LCC				1	GWDXT42E	NULL	NULL	ON			KWATR
LCC-1	GWDXT43E	DM	00	26	005-13	LCC				1	GWDXT43E	NULL	NULL	ON			KWATR
LCC-1	GWDXT49E	DM	00	23	005-10	LCC				1	GWDXT49E	NULL	NULL	OFF			KWATR
LCC-3	GWDXT53E	DM	05	02	005-17	1	0F	2	2	2	GWDXT29E	GWDXT53E	NULL	ON			KWATR
LCC-1	GWDXT65E	DM	00	18	005-05	LCC				1	GWDXT65E	NULL	NULL	ON			KWATR
LCC-1	GWDXT67E	DM	00	19	005-06	LCC				1	GWDXT67E	NULL	NULL	ON			KWATR
LCC-1	GWDXT69E	DM	00	20	005-07	LCC				1	GWDXT69E	NULL	NULL	ON			KWATR
LCC-1	GWDXT71E	DM	00	15	005-02	LCC				1	GWDXT71E	NULL	NULL	ON			KWATR
LCC-1	GWDXT73E	DM	00	16	005-03	LCC				1	GWDXT73E	NULL	NULL	ON			KWATR
LCC-1	GWDXT75E	DM	00	17	005-04	LCC				1	GWDXT75E	NULL	NULL	ON			KWATR
LCC-1	SS VERIFY	AM	01	03		LCC				1			ON				INTG
LCC-4	T55V1730A1	AM	11	03	010-04	LCC				1	T55V1730A1	NULL	NULL	NOL0	1.5	V	TRS

LCC TABLE & RCW ASSIGNMENTS

LCC	FD	TYPE	T#	R#	SEQ	1ST	X	Y	FD1	FD2	FD3	FD4	LO	HI	UNIT	RSYS
LCC-4	T55V1731A1	AM	11	04	019-05	LCC	1	1	T55V1731A1	NULL	NULL	NULL	NOL0	1.5	V	TRS
LCC-7	V45P0147A1	AM	03	35	001-26	LCC	1	1	V45P0147A1	NULL	NULL	NULL	55	75	PSIA	FCP
LCC-7	V45P0247A1	AM	03	36	001-27	LCC	1	1	V45P0247A1	NULL	NULL	NULL	55	75	PSIA	FCP
LCC-3	V45P0347A1	AM	03	37	001-28	LCC	1	1	V45P0347A1	NULL	NULL	NULL	55	75	PSIA	FCP
LCC-1	V45T0412A1	AM	00	02	001-33	LCC	2	3	V45T0412A1	V45T0422A1	V45T0432A1	NULL	65	NOHI	DEGF	FCP
LCC-1	V45T0422A1	AM	00	03	001-34	LCC	2	3	V45T0412A1	V45T0422A1	V45T0432A1	NULL	65	NOHI	DEGF	FCP
LCC-1	V45T0432A1	AM	00	04	001-35	LCC	2	3	V45T0412A1	V45T0422A1	V45T0432A1	NULL	65	NOHI	DEGF	FCP
LCC-1	V45T0450A1	AM	00	05	001-36	LCC	1	1	V45T0450A1	NULL	NULL	NULL	65	NOHI	DEGF	FCP
LCC-1	V45T0456A1	AM	00	01	001-32	LCC	1	1	V45T0456A1	NULL	NULL	NULL	157	235	DEGF	FCP
LCC-2	V45V0100A1	AM	07	34	010-19	LCC	1	2	V76V0100A1	V45V0100A1	NULL	NULL	NOL0	32.0	V	FCP
LCC-1	V45V0102A1	AM	00	06	001-37	LCC	1	1	V45V0102A1	NULL	NULL	NULL	NOL0	150	MV	FCP
LCC-1	V45V0103A1	AM	00	07	001-38	LCC	1	1	V45V0103A1	NULL	NULL	NULL	NOL0	150	MV	FCP
LCC-1	V45V0104A1	AM	00	08	001-39	LCC	1	1	V45V0104A1	NULL	NULL	NULL	NOL0	150	MV	FCP
LCC-3	V45V0200A1	AM	07	36	010-21	LCC	1	2	V76V0200A1	V45V0200A1	NULL	NULL	NOL0	32.0	V	FCP
LCC-1	V45V0202A1	AM	00	09	001-40	LCC	1	1	V45V0202A1	NULL	NULL	NULL	NOL0	150	MV	FCP
LCC-1	V45V0203A1	AM	00	10	001-41	LCC	1	1	V45V0203A1	NULL	NULL	NULL	NOL0	150	MV	FCP
LCC-1	V45V0204A1	AM	00	11	001-42	LCC	1	1	V45V0204A1	NULL	NULL	NULL	NOL0	150	MV	FCP
LCC-3	V45V0300A1	AM	07	38	010-23	LCC	1	2	V76V0300A1	V45V0300A1	NULL	NULL	NOL0	32.0	V	FCP
LCC-1	V45V0302A1	AM	00	12	001-43	LCC	1	1	V45V0302A1	NULL	NULL	NULL	NOL0	150	MV	FCP
LCC-1	V45V0303A1	AM	00	13	001-44	LCC	1	1	V45V0303A1	NULL	NULL	NULL	NOL0	150	MV	FCP
LCC-1	V45V0304A1	AM	00	14	001-45	LCC	1	1	V45V0304A1	NULL	NULL	NULL	NOL0	150	MV	FCP
LCC-3	V45X0143E1	DM	03	38	001-29	LCC	1	1	V45X0143E1	NULL	NULL	NULL	ON	ON	FCP	FCP
LCC-3	V45X0243E1	DM	03	39	001-30	LCC	1	1	V45X0243E1	NULL	NULL	NULL	ON	ON	FCP	FCP
LCC-3	V45X0343E1	DM	03	40	001-31	LCC	1	1	V45X0343E1	NULL	NULL	NULL	ON	ON	FCP	FCP
LCC-3	V45X1150E1	DM	03	29	001-20	LCC	1	1	V45X1150E1	NULL	NULL	NULL	ON	ON	FCP	FCP
LCC-3	V45X1155E1	DM	03	31	001-22	LCC	1	1	V45X1155E1	NULL	NULL	NULL	ON	ON	FCP	FCP
LCC-3	V45X1160E1	DM	03	33	001-24	LCC	1	1	V45X1160E1	NULL	NULL	NULL	ON	ON	FCP	FCP
LCC-3	V45X1185E1	DM	03	09	001-00	LCC	2	1	V45X1185E1	V45X1187E1	NULL	NULL	OFF	OFF	FCP	FCP
LCC-3	V45X1186E1	DM	03	11	001-02	LCC	2	1	V45X1186E1	V45X1188E1	NULL	NULL	OFF	OFF	FCP	FCP
LCC-3	V45X1187E1	DM	03	10	001-01	LCC	2	2	V45X1187E1	V45X1189E1	NULL	NULL	OFF	OFF	FCP	FCP
LCC-3	V45X1188E1	DM	03	12	001-03	LCC	2	2	V45X1188E1	V45X1190E1	NULL	NULL	OFF	OFF	FCP	FCP
LCC-3	V45X1285E1	DM	03	13	001-04	LCC	2	1	V45X1285E1	V45X1287E1	NULL	NULL	OFF	OFF	FCP	FCP
LCC-3	V45X1286E1	DM	03	15	001-06	LCC	2	1	V45X1286E1	V45X1288E1	NULL	NULL	OFF	OFF	FCP	FCP
LCC-3	V45X1287E1	DM	03	14	001-05	LCC	2	2	V45X1287E1	V45X1289E1	NULL	NULL	OFF	OFF	FCP	FCP
LCC-3	V45X1288E1	DM	03	16	001-07	LCC	2	2	V45X1288E1	V45X1290E1	NULL	NULL	OFF	OFF	FCP	FCP
LCC-3	V45X1385E1	DM	03	17	001-08	LCC	2	1	V45X1385E1	V45X1387E1	NULL	NULL	OFF	OFF	FCP	FCP
LCC-3	V45X1386E1	DM	03	19	001-10	LCC	2	1	V45X1386E1	V45X1388E1	NULL	NULL	OFF	OFF	FCP	FCP
LCC-3	V45X1387E1	DM	03	18	001-09	LCC	2	2	V45X1387E1	V45X1389E1	NULL	NULL	OFF	OFF	FCP	FCP
LCC-3	V45X1388E1	DM	03	20	001-11	LCC	2	2	V45X1388E1	V45X1390E1	NULL	NULL	OFF	OFF	FCP	FCP
LCC-3	V45X1485E1	DM	03	21	001-12	LCC	2	1	V45X1485E1	V45X1487E1	NULL	NULL	OFF	OFF	FCP	FCP
LCC-3	V45X1486E1	DM	03	23	001-14	LCC	2	1	V45X1486E1	V45X1488E1	NULL	NULL	OFF	OFF	FCP	FCP
LCC-3	V45X1487E1	DM	03	22	001-13	LCC	2	2	V45X1487E1	V45X1489E1	NULL	NULL	OFF	OFF	FCP	FCP
LCC-3	V45X1488E1	DM	03	24	001-15	LCC	2	2	V45X1488E1	V45X1490E1	NULL	NULL	OFF	OFF	FCP	FCP
LCC-3	V45X2150E1	DM	03	30	001-21	LCC	1	1	V45X2150E1	NULL	NULL	NULL	ON	ON	FCP	FCP
LCC-3	V45X2155E1	DM	03	32	001-23	LCC	1	1	V45X2155E1	NULL	NULL	NULL	ON	ON	FCP	FCP

LCC TABLE 8 ROW ASSIGNMENTS

LCC	FD	TYPE	T#	R#	SFQ	1ST	X	Y	FD1	FD2	FD3	FD4	LO	HI	UNIT	RSYS
LCC-3	V45X2160F1	DM	03	34	001-25	LCC	1	1	V45X2160F1	NULL	NULL	NULL	ON			FCP
LCC-3	V46P0152A1	AM	09	28	016-12	LCC	1	1	V46P0152A1	NULL	NULL	NULL	115	NOHI	PSIA	APU
LCC-3	V46P0190A1	AM	09	22	016-06	1 OF 2	1	2	V46P0190A1	V46P0191A1	NULL	NULL	NULO	24	PSIA	APU
LCC-3	V46P0191A1	AM	09	23	016-07	1 OF 2	2	2	V46P0190A1	V46P0191A1	NULL	NULL	NULO	24	PSIA	APU
LCC-3	V46P0252A1	AM	09	29	016-13	LCC	1	1	V46P0252A1	NULL	NULL	NULL	115	NOHI	PSIA	APU
LCC-3	V46P0290A1	AM	09	24	016-08	1 OF 2	1	2	V46P0290A1	V46P0291A1	NULL	NULL	NULO	24	PSIA	APU
LCC-3	V46P0291A1	AM	09	25	016-09	1 OF 2	2	2	V46P0290A1	V46P0291A1	NULL	NULL	NULO	24	PSIA	APU
LCC-3	V46P0352A1	AM	09	30	016-14	LCC	1	1	V46P0352A1	NULL	NULL	NULL	115	NOHI	PSIA	APU
LCC-3	V46P0390A1	AM	09	26	016-10	1 OF 2	1	2	V46P0390A1	V46P0391A1	NULL	NULL	NULO	24	PSIA	APU
LCC-3	V46P0391A1	AM	09	27	016-11	1 OF 2	2	2	V46P0390A1	V46P0391A1	NULL	NULL	NULO	24	PSIA	APU
LCC-2	V46T0122A1	AM	02	03	016-00	1 OF 2	1	2	V46T0122A1	V46T0174A1	NULL	NULL	204	436	DEGF	APU
LCC-2	V46T0174A1	AM	02	04	016-01	1 OF 2	2	2	V46T0122A1	V46T0174A1	NULL	NULL	204	436	DEGF	APU
LCC-2	V46T0222A1	AM	02	05	016-02	1 OF 2	1	2	V46T0222A1	V46T0274A1	NULL	NULL	204	436	DEGF	APU
LCC-2	V46T0274A1	AM	02	06	016-03	1 OF 2	2	2	V46T0222A1	V46T0274A1	NULL	NULL	204	436	DEGF	APU
LCC-2	V46T0322A1	AM	02	07	016-04	1 OF 2	1	2	V46T0322A1	V46T0374A1	NULL	NULL	204	436	DEGF	APU
LCC-2	V46T0374A1	AM	02	08	016-05	1 OF 2	2	2	V46T0322A1	V46T0374A1	NULL	NULL	204	436	DEGF	APU
LCC-3	V58Q0102A1	AM	09	19	015-00	LCC	1	1	V58Q0102A1	NULL	NULL	NULL	40	100	PCT	HYD
LCC-3	V58Q0202A1	AM	09	20	015-01	LCC	1	1	V58Q0202A1	NULL	NULL	NULL	40	100	PCT	HYD
LCC-3	V58Q0302A1	AM	09	21	015-02	LCC	1	1	V58Q0302A1	NULL	NULL	NULL	40	100	PCT	HYD
LCC-1	V58T0162A1	AM	00	47	015-03	LCC	1	1	V58T0162A1	NULL	NULL	NULL	40	100	DEGF	HYD
LCC-1	V58T0163A1	AM	00	48	015-04	LCC	1	1	V58T0163A1	NULL	NULL	NULL	40	100	DEGF	HYD
LCC-1	V58T0262A1	AM	00	49	015-05	LCC	1	1	V58T0262A1	NULL	NULL	NULL	40	100	DEGF	HYD
LCC-1	V58T0263A1	AM	00	50	015-06	LCC	1	1	V58T0263A1	NULL	NULL	NULL	40	100	DEGF	HYD
LCC-1	V58T0362A1	AM	01	01	015-07	LCC	1	1	V58T0362A1	NULL	NULL	NULL	40	100	DEGF	HYD
LCC-1	V58T0363A1	AM	01	02	015-08	LCC	1	1	V58T0363A1	NULL	NULL	NULL	40	100	DEGF	HYD
LCC-1	V61P2301A1	AM	00	37	013-31	1 OF 2	1	2	V61P2301A1	V61P2309A1	NULL	NULL	100	3300	PSIA	ECLS
LCC-1	V61P2309A1	AM	00	38	013-32	1 OF 2	2	2	V61P2301A1	V61P2309A1	NULL	NULL	100	3300	PSIA	ECLS
LCC-1	V61P2511A1	AM	00	32	013-00	2 OF 3	1	3	V61P2511A1	V61P2513A1	V61P2515A1	NULL	2.8	3.43	PSIA	ECLS
LCC-1	V61P2513A1	AM	00	33	013-01	2 OF 3	2	3	V61P2511A1	V61P2513A1	V61P2515A1	NULL	2.8	3.43	PSIA	ECLS
LCC-1	V61P2515A1	AM	00	34	013-02	2 OF 3	3	3	V61P2511A1	V61P2513A1	V61P2515A1	NULL	2.8	3.43	PSIA	ECLS
LCC-3	V61P2556A1	AM	08	23	013-03	LCC	1	1	V61P2556A1	NULL	NULL	NULL	4.2	6.8	INH20	ECLS
LCC-3	V61P2600A1	AM	08	24	013-04	1 OF 3	1	3	V61P2600A1	V61R2742A1	V61P2605A1	NULL	55	73	PSIA	ECLS
LCC-3	V61P2605A1	AM	08	26	013-06	1 OF 3	3	3	V61P2600A1	V61R2742A1	V61P2605A1	NULL	33	46	PSID	ECLS
LCC-3	V61P2642A1	AM	08	30	013-10	LCC	1	1	V61P2642A1	NULL	NULL	NULL	1.46	4.00	INH20	ECLS
LCC-3	V61P2647A1	AM	08	31	013-11	LCC	1	1	V61P2647A1	NULL	NULL	NULL	1.46	4.00	INH20	ECLS
LCC-3	V61P2658A1	AM	08	32	013-12	LCC	1	1	V61P2658A1	NULL	NULL	NULL	2.16	4.50	INH20	ECLS
LCC-3	V61P2700A1	AM	08	27	013-07	1 OF 3	1	3	V61P2700A1	V61R2722A1	V61P2705A1	NULL	55	73	PSIA	ECLS
LCC-3	V61P2705A1	AM	08	29	013-09	1 OF 3	3	3	V61P2700A1	V61R2722A1	V61P2705A1	NULL	33	46	PSID	ECLS
LCC-3	V61P2869A1	AM	08	36	013-16	LCC	1	1	V61P2869A1	NULL	NULL	NULL	3	5	INH20	ECLS
LCC-3	V61R2722A1	AM	08	28	013-08	1 OF 3	2	3	V61P2700A1	V61R2722A1	V61P2705A1	NULL	667	NOHI	LBM/HR	ECLS
LCC-3	V61R2742A1	AM	08	25	013-05	1 OF 3	2	3	V61P2600A1	V61R2742A1	V61P2605A1	NULL	667	NOHI	LBM/HR	ECLS
LCC-1	V61T2406A1	AM	00	39	013-33	1 OF 4	1	4	V61T2406A1	V61T2407A1	V61T2408A1	V61T2409A1	20	150	DEGF	ECLS
LCC-1	V61T2407A1	AM	00	40	013-34	1 OF 4	2	4	V61T2406A1	V61T2407A1	V61T2408A1	V61T2409A1	20	150	DEGF	ECLS
LCC-1	V61T2408A1	AM	00	41	013-35	1 OF 4	3	4	V61T2406A1	V61T2407A1	V61T2408A1	V61T2409A1	20	150	DEGF	ECLS
LCC-1	V61T2409A1	AM	00	42	013-36	1 OF 4	4	4	V61T2406A1	V61T2407A1	V61T2408A1	V61T2409A1	20	150	DEGF	ECLS

LCC TABLE & ROW ASSIGNMENTS

LCC	FD	TYPE	T#	R#	SFO	1ST	K	Y	FD1	FD2	FD3	FD4	L0	HI	UNIT	RSYS	
LCC-3	V61X2860E1	DM	03	34	013-14	3	OF	3	2	V61X2861E1	V61X2860E1	V61X2862E1	NULL	OFF		ECLS	
LCC-3	V61X2861E1	DM	08	33	013-13	3	OF	3	1	V61X2861E1	V61X2860E1	V61X2862E1	NULL	ON		ECLS	
LCC-3	V61X2862E1	DM	08	35	013-15	3	OF	3	3	V61X2861E1	V61X2860E1	V61X2862E1	NULL	OFF		ECLS	
LCC-3	V62X0596E1	DM	08	37	013-17	LCC		1	1	V62X0596E1	NULL	NULL	NULL	OFF		ECLS	
LCC-3	V62X0606E1	DM	08	38	013-18	LCC		1	1	V62X0606E1	NULL	NULL	NULL	OFF		ECLS	
LCC-3	V62X0607E1	DM	08	39	013-19	LCC		1	1	V62X0607E1	NULL	NULL	NULL	OFF		ECLS	
LCC-3	V62X0610E1	DM	08	40	013-20	LCC		1	1	V62X0610E1	NULL	NULL	NULL	OFF		ECLS	
LCC-3	V62X0611E1	DM	08	41	013-21	LCC		1	1	V62X0611E1	NULL	NULL	NULL	OFF		ECLS	
LCC-3	V62X0612E1	DM	08	42	013-22	LCC		1	1	V62X0612E1	NULL	NULL	NULL	OFF		ECLS	
LCC-3	V62X0620E1	DM	08	43	013-23	LCC		1	1	V62X0620E1	NULL	NULL	NULL	OFF		ECLS	
LCC-3	V62X0621E1	DM	08	44	013-24	LCC		1	1	V62X0621E1	NULL	NULL	NULL	OFF		ECLS	
LCC-3	V62X0622E1	DM	08	45	013-25	LCC		1	1	V62X0622E1	NULL	NULL	NULL	OFF		ECLS	
LCC-3	V62X0630E1	DM	08	46	013-26	LCC		1	1	V62X0630E1	NULL	NULL	NULL	OFF		ECLS	
LCC-3	V62X0631E1	DM	08	47	013-27	LCC		1	1	V62X0631E1	NULL	NULL	NULL	OFF		ECLS	
LCC-3	V62X0632E1	DM	08	48	013-28	LCC		1	1	V62X0632E1	NULL	NULL	NULL	OFF		ECLS	
LCC-3	V63P1108A1	AM	09	04	013-40	1	OF	2	1	V63P1108A1	V63Q1130A1	NULL	NULL	92	117	PSIA	ECLS
LCC-1	V63P1196A1	AM	00	45	013-44	LCC		1	1	V63P1196A1	NULL	NULL	NULL	5	505	PSIA	ECLS
LCC-1	V63P1197A1	AM	00	46	013-45	LCC		1	1	V63P1197A1	NULL	NULL	NULL	5	505	PSIA	ECLS
LCC-3	V63P1308A1	AM	09	11	013-51	1	OF	2	1	V63P1308A1	V63Q1130A1	NULL	NULL	77	100	PSIA	ECLS
LCC-3	V63Q1130A1	AM	09	05	013-41	1	OF	2	2	V63P1103A1	V63Q1130A1	NULL	NULL	23	39	PCT	ECLS
LCC-3	V63Q1330A1	AM	09	12	013-52	1	OF	2	2	V63P1303A1	V63Q1330A1	NULL	NULL	23	39	PCT	ECLS
LCC-3	V63R1100A1	AM	09	01	013-77	2	OF	2	1	V63R1100A1	V63R1103A1	NULL	NULL	2150	NOHI	LBM/HR	ECLS
LCC-3	V63R1103A1	AM	09	02	013-78	2	OF	2	2	V63R1100A1	V63R1103A1	NULL	NULL	190	NOHI	LBM/HR	ECLS
LCC-3	V63R1105A1	AM	09	03	013-79	2	OF	2	3	V63R1100A1	V63R1103A1	NULL	NULL	265	NOHI	LBM/HR	ECLS
LCC-3	V63R1300A1	AM	09	08	013-49	2	OF	2	1	V63R1300A1	V63R1303A1	NULL	NULL	2150	NOHI	LBM/HR	ECLS
LCC-3	V63R1303A1	AM	09	09	013-49	2	OF	2	3	V63R1300A1	V63R1303A1	NULL	NULL	190	NOHI	LBM/HR	ECLS
LCC-3	V63R1305A1	AM	09	10	013-50	2	OF	2	3	V63R1300A1	V63R1303A1	NULL	NULL	265	NOHI	LBM/HR	ECLS
LCC-1	V63T1180A1	AM	00	43	013-42	1	OF	2	1	V63T1180A1	V63T1188A1	NULL	NULL	-50	170	DEGF	ECLS
LCC-1	V63T1188A1	AM	00	44	013-43	1	OF	2	2	V63T1180A1	V63T1188A1	NULL	NULL	-50	170	DEGF	ECLS
LCC-3	V63T1207A1	AM	09	06	013-46	1	OF	2	1	V63T1207A1	V63T1407A1	NULL	NULL	30	50	DEGF	ECLS
LCC-3	V63T1407A1	AM	09	07	013-47	1	OF	2	2	V63T1207A1	V63T1407A1	NULL	NULL	30	50	DEGF	ECLS
LCC-1	V63X1751E1	DM	00	35	013-29	1	OF	2	1	V63X1751E1	V63X1761E1	NULL	NULL	ON			ECLS
LCC-1	V63X1761E1	DM	00	36	013-30	1	OF	2	2	V63X1751E1	V63X1761E1	NULL	NULL	ON			ECLS
LCC-3	V71X2021B1	DM	04	03	003-00	LCC		1	1	V71X2021B1	NULL	NULL	NULL	ON			ECLS
LCC-3	V71X2404X1	DM	04	28	003-25	LCC		1	1	V71X2404X1	NULL	NULL	NULL	ON			GNS
LCC-3	V71X2405X1	DM	04	10	003-07	LCC		1	1	V71X2405X1	NULL	NULL	NULL	ON			GNS
LCC-3	V71X2406X1	DM	04	29	003-26	LCC		1	1	V71X2406X1	NULL	NULL	NULL	ON			GNS
LCC-3	V71X2407X1	DM	04	11	003-08	LCC		1	1	V71X2407X1	NULL	NULL	NULL	ON			GNS
LCC-3	V71X3021B1	DM	04	04	003-01	LCC		1	1	V71X3021B1	NULL	NULL	NULL	ON			GNS
LCC-3	V71X3404X1	DM	04	30	003-27	LCC		1	1	V71X3404X1	NULL	NULL	NULL	ON			GNS
LCC-3	V71X3405X1	DM	04	16	003-13	LCC		1	1	V71X3405X1	NULL	NULL	NULL	ON			GNS
LCC-3	V71X3406X1	DM	04	31	003-28	LCC		1	1	V71X3406X1	NULL	NULL	NULL	ON			GNS
LCC-3	V71X3407X1	DM	04	17	003-14	LCC		1	1	V71X3407X1	NULL	NULL	NULL	ON			GNS
LCC-3	V71X4021B1	DM	04	05	003-02	LCC		1	1	V71X4021B1	NULL	NULL	NULL	ON			GNS
LCC-3	V71X4404X1	DM	04	32	003-29	LCC		1	1	V71X4404X1	NULL	NULL	NULL	ON			GNS

LCC TABLE 8, ROW ASSIGNMENTS

LCC	FD	TYPE	T#	R#	SFQ	1ST	X	Y	FD1	FD2	FD3	FD4	L0	HI	UNIT	RSYS
LCC-3	V71X4405X1	DM	04	22	003-10	LCC	1	1	V71X4405X1	NULL	NULL	NULL	ON			GNS
LCC-3	V71X4406X1	DM	04	33	003-30	LCC	1	1	V71X4406X1	NULL	NULL	NULL	ON			GNS
LCC-3	V71X4407X1	DM	04	24	003-20	LCC	1	1	V71X4407X1	NULL	NULL	NULL	ON			GNS
LCC-3	V72X4560X1	DM	04	24	003-21	LCC	1	1	V72X4560X1	NULL	NULL	NULL	OFF			GNS
LCC-4	V72X7011E1	DM	10	31	008-00	LCC	1	1	V72X7011E1	NULL	NULL	NULL	OFF			DPS
LCC-4	V72X7012E1	DM	10	32	008-01	LCC	1	1	V72X7012E1	NULL	NULL	NULL	OFF			DPS
LCC-4	V72X7013E1	DM	10	33	008-02	LCC	1	1	V72X7013E1	NULL	NULL	NULL	OFF			DPS
LCC-4	V72X7014E1	DM	10	34	008-03	LCC	1	1	V72X7014E1	NULL	NULL	NULL	OFF			DPS
LCC-4	V72X7015E1	DM	10	35	008-04	LCC	1	1	V72X7015E1	NULL	NULL	NULL	OFF			DPS
LCC-1	V74X0071X1	DM	00	29	006-00	LCC	3	1	V74X0071X1	V74X0081X1	V74X0091X1	NULL	ON			NAVA
LCC-1	V74X0081X1	DM	00	30	006-01	LCC	3	2	V74X0081X1	V74X0091X1	V74X0101X1	NULL	ON			NAVA
LCC-1	V74X0091X1	DM	00	31	006-02	LCC	3	3	V74X0091X1	V74X0101X1	V74X0111X1	NULL	ON			NAVA
LCC-3	V74X4730E1	DM	03	07	011-03	LCC	1	3	V74X4730E1	V74X4730E1	V74X4731E1	NULL	ON			COMM
LCC-3	V74X4731E1	DM	03	08	011-04	LCC	1	3	V74X4731E1	V74X4730E1	V74X4731E1	NULL	ON			COMM
LCC-3	V74X5052E1	DM	03	06	011-02	LCC	1	3	V74X5052E1	V74X4730E1	V74X4731E1	NULL	ON			COMM
LCC-3	V74X5176E1	DM	03	04	011-00	LCC	1	2	V74X5176E1	V74X5177E1	NULL	NULL	ON			COMM
LCC-3	V74X5177E1	DM	03	05	011-01	LCC	2	2	V74X5176E1	V74X5177E1	NULL	NULL	ON			COMM
LCC-3	V75X2121D1	DM	03	09	012-00	LCC	1	1	V75X2121D1	NULL	NULL	NULL	ON			INST
LCC-3	V75X2122D1	DM	03	10	012-01	LCC	1	1	V75X2122D1	NULL	NULL	NULL	ON			INST
LCC-3	V75X2123D1	DM	03	11	012-02	LCC	1	1	V75X2123D1	NULL	NULL	NULL	ON			INST
LCC-3	V75X2124D1	DM	03	12	012-03	LCC	1	1	V75X2124D1	NULL	NULL	NULL	ON			INST
LCC-3	V75X2125D1	DM	03	13	012-04	LCC	1	1	V75X2125D1	NULL	NULL	NULL	ON			INST
LCC-3	V75X2126D1	DM	03	14	012-05	LCC	1	1	V75X2126D1	NULL	NULL	NULL	ON			INST
LCC-3	V75X2127D1	DM	03	15	012-06	LCC	1	1	V75X2127D1	NULL	NULL	NULL	ON			INST
LCC-3	V75X2128D1	DM	03	16	012-07	LCC	1	1	V75X2128D1	NULL	NULL	NULL	ON			INST
LCC-3	V75X2130D1	DM	03	17	012-08	LCC	1	1	V75X2130D1	NULL	NULL	NULL	ON			INST
LCC-3	V75X2131D1	DM	03	18	012-09	LCC	1	1	V75X2131D1	NULL	NULL	NULL	ON			INST
LCC-3	V75X2132D1	DM	03	19	012-10	LCC	1	1	V75X2132D1	NULL	NULL	NULL	ON			INST
LCC-3	V75X2133D1	DM	03	20	012-11	LCC	1	1	V75X2133D1	NULL	NULL	NULL	ON			INST
LCC-3	V75X2134D1	DM	03	21	012-12	LCC	1	1	V75X2134D1	NULL	NULL	NULL	ON			INST
LCC-3	V76S0163E1	DM	07	45	010-48	LCC	3	3	V76S0163E1	V76X0236E1	V76X0335E1	NULL	ON			EPDC
LCC-3	V76S0263E1	DM	07	48	010-51	LCC	3	3	V76S0263E1	V76X0336E1	V76X0136E1	NULL	ON			EPDC
LCC-3	V76S0363E1	DM	08	01	010-54	LCC	3	3	V76S0363E1	V76X0135E1	V76X0235E1	NULL	ON			EPDC
LCC-3	V76V0100A1	AM	07	33	010-18	LCC	1	2	V76V0100A1	V45V0100A1	NULL	NULL	NOL0	32.0	V	FCP
LCC-3	V76V0200A1	AM	07	35	010-20	LCC	1	2	V76V0200A1	V45V0200A1	NULL	NULL	NOL0	32.0	V	FCP
LCC-3	V76V0300A1	AM	07	37	010-22	LCC	1	2	V76V0300A1	V45V0300A1	NULL	NULL	NOL0	32.0	V	FCP
LCC-3	V76V1500A1	AM	07	24	010-01	LCC	1	1	V76V1500A1	NULL	NULL	NULL	115	120	VAC	EPDC
LCC-3	V76V1501A1	AM	07	25	010-03	LCC	1	1	V76V1501A1	NULL	NULL	NULL	115	120	VAC	EPDC
LCC-3	V76V1502A1	AM	07	26	010-05	LCC	1	1	V76V1502A1	NULL	NULL	NULL	115	120	VAC	EPDC
LCC-3	V76V1600A1	AM	07	27	010-07	LCC	1	1	V76V1600A1	NULL	NULL	NULL	115	120	VAC	EPDC
LCC-3	V76V1601A1	AM	07	28	010-09	LCC	1	1	V76V1601A1	NULL	NULL	NULL	115	120	VAC	EPDC
LCC-3	V76V1602A1	AM	07	29	010-11	LCC	1	1	V76V1602A1	NULL	NULL	NULL	115	120	VAC	EPDC
LCC-3	V76V1700A1	AM	07	30	010-13	LCC	1	1	V76V1700A1	NULL	NULL	NULL	115	120	VAC	EPDC
LCC-3	V76V1701A1	AM	07	31	010-15	LCC	1	1	V76V1701A1	NULL	NULL	NULL	115	120	VAC	EPDC
LCC-3	V76V1702A1	AM	07	32	010-17	LCC	1	1	V76V1702A1	NULL	NULL	NULL	115	120	VAC	EPDC

LCC TABLE 3 ROW ASSIGNMENTS

LCC	FD	TYPE	#	R#	SFQ	1ST	X	Y	FD1	FD2	FD3	FD4	LO	HI	UNIT	RSYS
LCC-3	V76V3092A1	AM	07	43	010-28	1	0F	2	1	V76V3092A1	V76V3093A1	NULL	26.5	32.0	V	EPDC
LCC-3	V76V3093A1	AM	07	44	010-29	1	0F	2	2	V76V3092A1	V76V3093A1	NULL	26.5	32.0	V	EPDC
LCC-4	V76X0124E1	DM	10	48	010-40	2	0F	3	3	V76X0124E1	V76X0124E1	NULL	ON			EPDC
LCC-4	V76X0125E1	DM	10	40	010-32	2	0F	3	1	V76X0125E1	V76X0325E1	NULL	ON			EPDC
LCC-4	V76X0126E1	DM	10	43	010-35	2	0F	3	1	V76X0126E1	V76X0326E1	NULL	ON			EPDC
LCC-3	V76X0135E1	DM	08	02	010-55	2	0F	3	2	V76S0363E1	V76X0135E1	NULL	ON			EPDC
LCC-3	V76X0136E1	DM	07	50	010-53	2	0F	3	3	V76S0263E1	V76X0136E1	NULL	ON			EPDC
LCC-4	V76X0224E1	DM	10	46	010-39	2	0F	3	1	V76X0224E1	V76X0324E1	NULL	ON			EPDC
LCC-4	V76X0225E1	DM	10	41	010-33	2	0F	3	2	V76X0125E1	V76X0325E1	NULL	ON			EPDC
LCC-4	V76X0226E1	DM	10	44	010-36	2	0F	3	2	V76X0126E1	V76X0326E1	NULL	ON			EPDC
LCC-3	V76X0235E1	DM	08	03	010-56	2	0F	3	3	V76S0363E1	V76X0135E1	NULL	ON			EPDC
LCC-3	V76X0236E1	DM	07	46	010-49	2	0F	3	2	V76S0163E1	V76X0326E1	NULL	ON			EPDC
LCC-4	V76X0324E1	DM	10	47	010-39	2	0F	3	2	V76X0224E1	V76X0124E1	NULL	ON			EPDC
LCC-4	V76X0325E1	DM	10	42	010-34	2	0F	3	3	V76X0125E1	V76X0325E1	NULL	ON			EPDC
LCC-4	V76X0326E1	DM	10	45	010-37	2	0F	3	3	V76X0126E1	V76X0326E1	NULL	ON			EPDC
LCC-3	V76X0335E1	DM	07	47	010-50	2	0F	3	3	V76S0163E1	V76X0236E1	NULL	ON			EPDC
LCC-3	V76X0336E1	DM	07	49	010-52	2	0F	3	2	V76S0263E1	V76X0336E1	NULL	ON			EPDC
LCC-3	V76X6775E1	DM	07	39	010-24	LCC				V76X6775E1	NULL	NULL	OFF			EPDC
LCC-3	V76X6776E1	DM	07	40	010-25	LCC				V76X6776E1	NULL	NULL	OFF			EPDC
LCC-3	V76X6777E1	DM	07	41	010-26	LCC				V76X6777E1	NULL	NULL	OFF			EPDC
LCC-3	V76X6778E1	DM	07	42	010-27	LCC				V76X6778E1	NULL	NULL	OFF			EPDC
LCC-3	V79X1860X1	DM	04	37	004-00	LCC				V79X1860X1	NULL	NULL	ON			GNS
LCC-3	V79X1861X1	DM	04	38	004-01	LCC				V79X1861X1	NULL	NULL	ON			GNS
LCC-3	V79X1862X1	DM	04	39	004-02	LCC				V79X1862X1	NULL	NULL	ON			GNS
LCC-3	V79X1865X1	DM	04	40	004-03	LCC				V79X1865X1	NULL	NULL	ON			GNS
LCC-3	V79X1866X1	DM	04	41	004-04	LCC				V79X1866X1	NULL	NULL	ON			GNS
LCC-3	V79X1867X1	DM	04	42	004-05	LCC				V79X1867X1	NULL	NULL	ON			GNS
LCC-3	V79X1870X1	DM	04	43	004-06	LCC				V79X1870X1	NULL	NULL	ON			GNS
LCC-3	V79X1871X1	DM	04	44	004-07	LCC				V79X1871X1	NULL	NULL	ON			GNS
LCC-3	V79X1872X1	DM	04	45	004-08	LCC				V79X1872X1	NULL	NULL	ON			GNS
LCC-3	V79X1875X1	DM	04	46	004-09	LCC				V79X1875X1	NULL	NULL	ON			GNS
LCC-3	V79X1876X1	DM	04	47	004-10	LCC				V79X1876X1	NULL	NULL	ON			GNS
LCC-3	V79X1877X1	DM	04	48	004-11	LCC				V79X1877X1	NULL	NULL	ON			GNS
LCC-3	V91Q1710CX	DP	05	16	008-62	LCC				V91Q1710CX	NULL	NULL	B001	B010		DPS
LCC-3	V91Q1711CX	DP	06	17	008-63	LCC				V91Q1711CX	NULL	NULL	B001	B010		DPS
LCC-3	V91Q1712CX	DP	06	18	008-64	LCC				V91Q1712CX	NULL	NULL	B001	B010		DPS
LCC-3	V91Q1713CX	DP	06	19	008-65	LCC				V91Q1713CX	NULL	NULL	B001	B010		DPS
LCC-3	V91X1716XX	DM	06	12	008-58	LCC				V91X1716XX	NULL	NULL	ON			DPS
LCC-3	V91X1717XX	DM	06	13	008-59	LCC				V91X1717XX	NULL	NULL	ON			DPS
LCC-3	V91X1718XX	DM	06	14	008-60	LCC				V91X1718XX	NULL	NULL	ON			DPS
LCC-3	V91X1719XX	DM	06	15	008-61	LCC				V91X1719XX	NULL	NULL	ON			DPS
LCC-3	V91X2242XX	DM	05	15	008-05	LCC				V91X2242XX	NULL	NULL	OFF			DPS
LCC-3	V91X2243XX	DM	05	16	008-06	LCC				V91X2243XX	NULL	NULL	OFF			DPS
LCC-3	V91X2244XX	DM	05	17	008-07	LCC				V91X2244XX	NULL	NULL	OFF			DPS
LCC-3	V91X2245XX	DM	05	18	008-08	LCC				V91X2245XX	NULL	NULL	OFF			DPS



LCC TABLE & ROW ASSIGNMENTS

LCC	FD	TYPE	T#	R#	SEQ	1ST	X	Y	FD1	FD2	FD3	FD4	LO	HI	UNIT	RSYS
LCC-3	V91X2246XX	DM	05	19	008-09	LCC	1	1	V91X2246XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2247XX	DM	05	20	008-10	LCC	1	1	V91X2247XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2248XX	DM	05	21	008-11	LCC	1	1	V91X2248XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2249XX	DM	05	22	008-12	LCC	1	1	V91X2249XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2253XX	DM	05	23	008-13	LCC	1	1	V91X2253XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2254XX	DM	05	24	008-14	LCC	1	1	V91X2254XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2255XX	DM	05	25	008-15	LCC	1	1	V91X2255XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2261XX	DM	05	26	008-16	LCC	1	1	V91X2261XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2262XX	DM	05	27	008-17	LCC	1	1	V91X2262XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2263XX	DM	05	28	008-18	LCC	1	1	V91X2263XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2264XX	DM	05	29	008-19	LCC	1	1	V91X2264XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2277XX	DM	05	30	008-20	2 OF 3	1	3	V91X2277XX	V91X2278XX	V91X2279XX	NULL	OFF			DPS
LCC-3	V91X2278XX	DM	05	31	008-21	2 OF 3	2	3	V91X2278XX	V91X2278XX	V91X2279XX	NULL	OFF			DPS
LCC-3	V91X2279XX	DM	05	32	008-22	2 OF 3	3	3	V91X2279XX	V91X2278XX	V91X2279XX	NULL	OFF			DPS
LCC-3	V91X2802XX	DM	05	33	008-23	LCC	1	1	V91X2802XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2803XX	DM	05	34	008-24	LCC	1	1	V91X2803XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2804XX	DM	05	35	008-25	LCC	1	1	V91X2804XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2805XX	DM	05	36	008-26	LCC	1	1	V91X2805XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2806XX	DM	05	37	008-27	LCC	1	1	V91X2806XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2807XX	DM	05	38	008-28	LCC	1	1	V91X2807XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2808XX	DM	05	39	008-29	LCC	1	1	V91X2808XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2809XX	DM	05	40	008-30	LCC	1	1	V91X2809XX	NULL	NULL	NULL	OFF			DPS
LCC-4	V91X2831XX	DM	10	36	008-31	LCC	1	1	V91X2831XX	NULL	NULL	NULL	OFF			DPS
LCC-4	V91X2833XX	DM	10	37	008-32	LCC	1	1	V91X2833XX	NULL	NULL	NULL	OFF			DPS
LCC-4	V91X2835XX	DM	10	38	008-33	LCC	1	1	V91X2835XX	NULL	NULL	NULL	OFF			DPS
LCC-4	V91X2837XX	DM	10	39	008-34	LCC	1	1	V91X2837XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2900XX	DM	05	41	008-35	LCC	1	1	V91X2900XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2901XX	DM	05	42	008-36	LCC	1	1	V91X2901XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2902XX	DM	05	43	008-37	1 OF 2	1	2	V91X2902XX	V91X2903XX	NULL	NULL	OFF			DPS
LCC-3	V91X2903XX	DM	05	44	008-38	1 OF 2	2	2	V91X2903XX	V91X2904XX	NULL	NULL	OFF			DPS
LCC-3	V91X2904XX	DM	05	45	008-39	LCC	1	1	V91X2904XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2905XX	DM	05	46	008-40	LCC	1	1	V91X2905XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2906XX	DM	05	47	008-41	LCC	1	1	V91X2906XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2907XX	DM	05	48	008-42	LCC	1	1	V91X2907XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2917XX	DM	05	49	008-43	LCC	1	1	V91X2917XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2918XX	DM	05	50	008-44	LCC	1	1	V91X2918XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2919XX	DM	06	01	008-45	LCC	1	1	V91X2919XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2920XX	DM	06	02	008-46	LCC	1	1	V91X2920XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2921XX	DM	06	03	008-47	LCC	1	1	V91X2921XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2922XX	DM	06	04	008-48	LCC	1	1	V91X2922XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2923XX	DM	06	05	008-49	LCC	1	1	V91X2923XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2924XX	DM	06	06	008-50	LCC	1	1	V91X2924XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2925XX	DM	06	07	008-51	LCC	1	1	V91X2925XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2926XX	DM	06	08	008-52	LCC	1	1	V91X2926XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2928XX	DM	06	09	008-53	LCC	1	1	V91X2928XX	NULL	NULL	NULL	OFF			DPS

LCC TABLE & ROW ASSIGNMENTS

LCC	FD	TYPE	T#	R#	SFO	1ST	X	Y	FD1	FD2	FD3	FD4	L0	HI	UNIT	RSYS
LCC-3	V91X2931XX	DM	06	10	003-54	LCC	1	1	V91X2931XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V91X2934XX	DM	06	11	003-55	LCC	1	1	V91X2934XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V92X6722XX	DM	06	20	003-66	LCC	1	1	V92X6722XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V92X6781XX	DM	06	21	003-67	LCC	1	1	V92X6781XX	NULL	NULL	NULL	OFF			DPS
LCC-3	V92X7366XX	DM	06	30	003-76	LCC	4	1	V92X7366XX	V92X7426XX	V92X7486XX	V92X7546XX	OFF			DPS
LCC-3	V92X7367XX	DM	06	34	003-80	LCC	4	1	V92X7367XX	V92X7427XX	V92X7487XX	V92X7547XX	OFF			DPS
LCC-3	V92X7368XX	DM	06	22	003-68	LCC	3	0F 4	V92X7368XX	V92X7428XX	V92X7488XX	V92X7548XX	ON			DPS
LCC-3	V92X7369XX	DM	06	26	003-72	LCC	4	1	V92X7369XX	V92X7429XX	V92X7489XX	V92X7549XX	ON			DPS
LCC-3	V92X7366XX	DM	06	31	003-77	LCC	4	2	V92X7366XX	V92X7426XX	V92X7486XX	V92X7546XX	OFF			DPS
LCC-3	V92X7427XX	DM	06	35	003-81	LCC	4	2	V92X7367XX	V92X7427XX	V92X7487XX	V92X7547XX	OFF			DPS
LCC-3	V92X7428XX	DM	06	23	003-60	LCC	4	2	V92X7368XX	V92X7428XX	V92X7488XX	V92X7548XX	ON			DPS
LCC-3	V92X7429XX	DM	06	27	003-73	LCC	4	2	V92X7369XX	V92X7429XX	V92X7489XX	V92X7549XX	ON			DPS
LCC-3	V92X7486XX	DM	06	32	003-78	LCC	4	3	V92X7366XX	V92X7426XX	V92X7486XX	V92X7546XX	OFF			DPS
LCC-3	V92X7487XX	DM	06	36	003-82	LCC	4	3	V92X7367XX	V92X7427XX	V92X7487XX	V92X7547XX	OFF			DPS
LCC-3	V92X7488XX	DM	06	24	003-70	LCC	4	3	V92X7368XX	V92X7428XX	V92X7488XX	V92X7548XX	ON			DPS
LCC-3	V92X7489XX	DM	06	28	003-74	LCC	4	3	V92X7369XX	V92X7429XX	V92X7489XX	V92X7549XX	ON			DPS
LCC-3	V92X7546XX	DM	06	33	003-79	LCC	4	4	V92X7366XX	V92X7426XX	V92X7486XX	V92X7546XX	OFF			DPS
LCC-3	V92X7547XX	DM	06	37	003-87	LCC	4	4	V92X7367XX	V92X7427XX	V92X7487XX	V92X7547XX	OFF			DPS
LCC-3	V92X7548XX	DM	06	25	003-71	LCC	4	4	V92X7368XX	V92X7428XX	V92X7488XX	V92X7548XX	ON			DPS
LCC-3	V92X7549XX	DM	06	29	003-75	LCC	4	4	V92X7369XX	V92X7429XX	V92X7489XX	V92X7549XX	ON			DPS
LCC-3	V95X0030X1	DM	04	25	003-22	LCC	1	1	V95X0030X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X0031X1	DM	04	34	003-31	LCC	1	1	V95X0031X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X0033X1	DM	04	06	003-03	LCC	1	1	V95X0033X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X0034X1	DM	04	07	003-04	LCC	1	1	V95X0034X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X0035X1	DM	04	08	003-05	LCC	1	1	V95X0035X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X0037X1	DM	04	09	003-06	LCC	1	1	V95X0037X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X1030X1	DM	04	26	003-27	LCC	1	1	V95X1030X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X1031X1	DM	04	35	003-32	LCC	1	1	V95X1031X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X1033X1	DM	04	12	003-09	LCC	1	1	V95X1033X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X1034X1	DM	04	13	003-10	LCC	1	1	V95X1034X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X1035X1	DM	04	14	003-11	LCC	1	1	V95X1035X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X1037X1	DM	04	15	003-12	LCC	1	1	V95X1037X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X2030X1	DM	04	27	003-24	LCC	1	1	V95X2030X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X2031X1	DM	04	36	003-33	LCC	1	1	V95X2031X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X2033X1	DM	04	18	003-15	LCC	1	1	V95X2033X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X2034X1	DM	04	19	003-16	LCC	1	1	V95X2034X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X2035X1	DM	04	20	003-17	LCC	1	1	V95X2035X1	NULL	NULL	NULL	OFF			GNS
LCC-3	V95X2037X1	DM	04	21	003-18	LCC	1	1	V95X2037X1	NULL	NULL	NULL	OFF			GNS
LCC-3	XFCPVH09A	AM	01	14	014-50	LCC	1	2	XFCPVH09A	XFCPVH29A	NULL	NULL	1.4		PSI	VPVD
LCC-3	XFCPVH19A	AM	01	18	014-54	LCC	1	2	XFCPVH19A	XFCPVH39A	NULL	NULL	.8		PSI	VPVD
LCC-3	XFCPVH29A	AM	01	15	014-51	LCC	2	2	XFCPVH09A	XFCPVH29A	NULL	NULL	1.4		PSI	VPVD
LCC-3	XFCPVH39A	AM	01	19	014-55	LCC	2	2	XFCPVH19A	XFCPVH39A	NULL	NULL	.8		PSI	VPVD
LCC-3	XFCPVH59A	AM	01	16	014-52	LCC	2	2	XFCPVH59A	XFCPVH69A	NULL	NULL	.4		PSI	VPVD
LCC-3	XFCPVH69A	AM	01	17	014-53	LCC	2	2	XFCPVH59A	XFCPVH69A	NULL	NULL	.4		PSI	VPVD
LCC-3	XWDPVF24A	AM	01	10	005-52	LCC	1	2	XWDPVF24A	XWDPVF34A	NULL	NULL	1500		NOHI	WVATR

LCC TABLE & ROW ASSIGNMENTS

LCC	FD	TYPE	T#	R#	SEQ	1ST	X	Y	FD1	FD2	FD3	FD4	LO	HI	UNIT	RSYS
LCC-3	XWDRVF34A	AM	01	11	005-53	1 OF 2	2	2	XWDPVF24A	XWDPVF34A	NULL	NULL	1500	NOHI	PGIG	VWATR
LCC-2	XWDRVF44A	AM	01	12	005-54	1 OF 2	1	2	XWDPVF44A	XWDPVF54A	NULL	NULL	1500	NOHI	PGIG	VWATR
LCC-2	XWDRVF54A	AM	01	13	005-55	1 OF 2	2	2	XWDPVF44A	XWDPVF54A	NULL	NULL	1500	NOHI	PGIG	VWATR
LCC-3	XWDRVF04A	AM	01	08	005-50	1 OF 2	1	2	XWDQVF04A	XWDQVF14A	NULL	NULL	305.1	NOHI	FT	VWATR
LCC-3	XWDRVF14A	AM	01	09	005-51	1 OF 2	2	2	XWDQVF04A	XWDQVF14A	NULL	NULL	305.1	NOHI	FT	VWATR





VFY TABLE & ROW ASSIGNMENTS

ELSE	FD	TAR	ROW	SEQ	1ST ELSE	STATE-LIMITS	UNITS	SYSTEM	ROW	PSEUDO
EXIT	XWDXVB23E	00	01	28650	1 OF 2	ON		VWATR	N03IS272D	
EXIT	XWDXVB33E	00	02	28652	1 OF 2	ON		VWATR	N03IS273D	
EXIT	XWDXVB43E	00	03	28654	1 OF 2	ON		VWATR	N03IS274D	
EXIT	XWDXVB53E	00	04	28656	1 OF 2	ON		VWATR	N03IS275D	
EXIT	XWDXVB63E	00	05	28658	1 OF 2	ON		VWATR	N03IS276D	
EXIT	XWDXVC23E	00	06	28651	1 OF 2	ON		VWATR	N03IS277D	
EXIT	XWDXVC33E	00	07	28653	1 OF 2	ON		VWATR	N03IS278D	
EXIT	XWDXVC43E	00	08	28655	1 OF 2	ON		VWATR	N03IS279D	
EXIT	XWDXVC53E	00	09	28657	1 OF 2	ON		VWATR	N03IS280D	
EXIT	XWDXVC63E	00	10	28659	1 OF 2	ON		VWATR	N03IS281D	
INHB MSEQ	XWDXVC03E	00	11	23850	1 OF 2	ON		VWATR	N03IS282D	
INHB MSEQ	XWDXVC13E	00	12	23851	1 OF 2	ON		VWATR	N03IS283D	
INHB MSEQ	GSAX8221E	00	13	24550	1 OF 6	ON		VGOX	N03IS336D	
INHB MSEQ	GSAX8222E	00	14	24551	1 OF 6	ON		VGOX	N03IS341D	
INHB MSEQ	GSAX8191A	00	15	24552	1 OF 6	N0LO	DEG	VGOX	N03IS342D	
INHB MOAA	XEGXVB53E	01	01	12200	1 OF 2	ON		VARMS	N03IS272D	
INHB MOAA	XEGXVC53E	01	02	12201	1 OF 2	ON		VARMS	N03IS273D	
INHB MOAA	XEGXVB07E	01	03	13300	1 OF 2	ON		VARMS	N03IS274D	
INHB MOAA	XEGXVC03E	01	04	13301	1 OF 2	ON		VARMS	N03IS275D	
INHB MAPU	XEGXVB13E	01	05	13651	1 OF 3	ON		VARMS	N03IS276D	
INHB MAPU	XEGXVC13E	01	06	13652	1 OF 3	ON		VARMS	N03IS277D	
INHB MAPU	XEGPVQ09A	01	07	13653	1 OF 3	N0LO	FT	VARMS	N03IS278D	
INHB MSEQ	XWDPVF44A	01	08	25001	1 OF 2	N0LO	PSIG	VWATR	N03IS279D	
INHB MSEQ	XWDPVF54A	01	09	25002	1 OF 2	N0LO	PSIG	VWATR	N03IS280D	
INHB MSEQ	GSAX8336E	01	10	24553	1 OF 6	ON		VGOX	N03IS281D	
INHB MSEQ	GSAX8227E	01	11	24554	1 OF 6	ON		VGOX	N03IS282D	
INHB MSEQ	GSAX8196A	01	12	24555	1 OF 6	N0LO	DEG	VGOX	N03IS283D	
1 OF 4	GSAX7551E	01	15	13100	1 OF 4	ON		KARMS	N03IS342D	
1 OF 4	GSAX7556E	01	16	13101	1 OF 4	ON		KARMS	N03IS343D	
1 OF 4	GSAX7541E	02	01	13102	1 OF 4	OFF		KARMS	N03IS272D	
GTO ST200	GSAX7546E	02	02	13103	1 OF 4	OFF		KARMS	N03IS273D	
1 OF 4	GSAX7571E	02	03	13104	1 OF 4	ON		KARMS	N03IS274D	
1 OF 4	GSAX7576E	02	04	13105	1 OF 4	ON		KARMS	N03IS275D	
1 OF 4	GSAX7561E	02	05	13106	1 OF 4	OFF		KARMS	N03IS276D	
GTO ST200	GSAX7566E	02	06	13107	1 OF 4	OFF		KARMS	N03IS277D	
1 OF 4	GSAX7111E	02	07	13200	1 OF 4	OFF		KARMS	N03IS278D	
1 OF 4	GSAX7116E	02	08	13201	1 OF 4	OFF		KARMS	N03IS279D	
1 OF 4	GSAX7112E	02	09	13202	1 OF 4	ON		KARMS	N03IS280D	
GTO ST200	GSAX7117E	02	10	13203	1 OF 4	ON		KARMS	N03IS281D	
1 OF 4	GSAX7113E	02	11	13204	1 OF 4	OFF		KARMS	N03IS282D	
1 OF 4	GSAX7118E	02	12	13205	1 OF 4	OFF		KARMS	N03IS283D	
1 OF 4	GSAX7114E	02	13	13206	1 OF 4	ON		KARMS	N03IS336D	
GTO ST200	GSAX7119E	02	14	13207	1 OF 4	ON		KARMS	N03IS341D	
INHB MAPU	V58X0182E1	02	15	13800	VFY	ON		HYD	N03IS342D	

VFY TABLE & ROW ASSIGNMENTS

ELSE	FD	TAR	ROW	SEQ	1ST	FLSE	STATE-LIMITS	UNITS	SYSTEM	ROW	PSEUDO
INHB MAPU	V58X0282E1	02	16	13801	VFY	ON			HYD	N03IS343D	
INHR MAPU	V58X0382E1	03	01	13802	VFY	ON			HYD	N03IS272D	
INHB MAPU	V58S0172E1	07	02	13803	VFY	ON			HYD	N03IS273D	
INHB MAPU	V58S0272E1	03	03	13804	VFY	ON			HYD	N03IS274D	
INHB MAPU	V58S0372E1	03	04	13805	VFY	ON			HYD	N03IS275D	
INHR MAPU	V58S0173E1	03	05	13806	VFY	ON			HYD	N03IS276D	
INHR MAPU	V58S0273E1	03	06	13807	VFY	ON			HYD	N03IS277D	
INHB MAPU	V58S0373E1	03	07	13808	VFY	OH			HYD	N03IS278D	
INHB MSEQ	GL0P4644A	03	08	18601	1 OF 3	NOLO	.1	PSID	L02	N03IS279D	
INHB MSEQ	GL0P4144A	03	09	18602	1 OF 3	NOLO	.1	PSID	L02	N03IS280D	
INHB MSEQ	GL0P4134A	03	10	18603	1 OF 3	NOLO	125	PSID	L02	N03IS281D	
INHB MSEQ	GL0X4143E	03	11	18604	2 OF 2	OFF			L02	N03IS282D	
INHB MSEQ	GL0X4643E	03	12	18605	2 OF 2	OFF			L02	N03IS283D	
INHB MAPU	V75X2529E1	07	13	14400	3 OF 3	ON			INST	N03IS336D	
INHB MAPU	V75T2517A1	03	14	14401	3 OF 3	NOLO	120	DEGF	INST	N03IS341D	
INHB MAPU	V75X2523E1	03	15	14402	3 OF 3	ON			INST	N03IS342D	
INHR MAPU	V75X2629E1	03	16	14403	3 OF 3	ON			INST	N03IS343D	
INHR MAPU	V75T2617A1	04	01	14404	3 OF 3	NOLO	120	DEGF	INST	N03IS272D	
INHR MAPU	V75X2623E1	04	02	14405	3 OF 3	ON			INST	N03IS273D	
1 OF 4	GSAX7626E	04	03	14500	1 OF 4	ON			KARMS	N03IS274D	
1 OF 4	GSAX7621E	04	04	14501	1 OF 4	ON			KARMS	N03IS275D	
1 OF 4	GAH7831A	04	05	14502	1 OF 4	NOLO	2	DEG	KARMS	N03IS276D	
INHB MAPU	GAH7836A	04	06	14503	1 OF 4	NOLO	2	DEG	KARMS	N03IS277D	
INHR MPS4	R55X1870X1	04	07	15300	VFY	ON			BRS	N03IS278D	
INHR MPS4	R55X2870X1	04	08	15301	VFY	ON			BRS	N03IS279D	
INHR MPS4	T55X1870X1	04	09	15302	VFY	ON			TRS	N03IS280D	
INHR MPS4	R55X1869X1	04	10	15303	VFY	OFF			BRS	N03IS281D	
INHD MPS4	R55X2869X1	04	11	15304	VFY	OFF			BRS	N03IS282D	
INHD MPS4	T55X1869X1	04	12	15305	VFY	OFF			TRS	N03IS283D	
INHR MPS4	R55X1843X1	04	13	15308	VFY	OFF			BPYR	N03IS336D	
INHR MPS4	R55X2843X1	04	14	15309	VFY	OFF			BPYR	N03IS341D	
INHR MPS4	R55C1051C1	04	15	15310	VFY	.02	.75	AMP	BRS	N03IS342D	
INHR MPS4	B55C2051C1	04	16	15311	VFY	.02	.75	AMP	BRS	N03IS343D	
INHD MPS4	V41T1151A1	05	02	15700	1 OF 3	10	95	DEGF	MPS	N03IS273D	
INHD MPS4	V41T1251A1	05	03	15701	1 OF 3	10	95	DEGF	MPS	N03IS274D	
INHD MPS4	V41T1351A1	05	04	15702	1 OF 3	10	95	DEGF	MPS	N03IS275D	
INHR MPS4	V41T1152A1	05	05	15703	1 OF 3	60	145	DEGF	MPS	N03IS276D	
INHR MPS4	V41T1252A1	05	06	15704	1 OF 3	60	145	DEGF	MPS	N03IS277D	
INHR MPS4	V41T1352A1	05	07	15705	1 OF 3	60	145	DEGF	MPS	N03IS278D	
INHB MPS4	V58P0115A1	05	08	15900	VFY	2850	3400	PSIA	HYD	N03IS279D	
INHB MPS4	V58P0116C1	05	09	15901	VFY	2800	3400	PSIA	HYD	N03IS280D	
INHR MPS4	V58P0215A1	05	10	15902	VFY	2850	3400	PSIA	HYD	N03IS281D	
INHR MPS4	V58P0216C1	05	11	15903	VFY	2800	3400	PSIA	HYD	N03IS282D	
INHB MPS4	V58P0315A1	05	12	15904	VFY	2850	3400	PSIA	HYD	N03IS283D	

VFY TABLE & RCW ASSIGNMENTS

ELSE	FD	TAB	ROW	SEQ	1ST	ELSE	STATE-LIMITS	UNITS	SYSTEM	ROW	PSEUDO
INHB MPS4	V58P00316C1	05	13	15905	VFY	2800	3400	PSIA	HYD	N03IS336D	
INHB MPS4	E41P1054B1	05	14	16000	VFY	2700	N0HI	PSIA	SSME	N03IS341D	
INHB MPS4	E41P2054B1	05	15	16001	VFY	2700	N0HI	PSIA	SSME	N03IS342D	
INHB MPS4	E41P3054B1	05	16	16002	VFY	2700	N0HI	PSIA	SSME	N03IS343D	
INHB MSEQ	V58X1725E1	06	01	16600	VFY	ON			MECH	N03IS272D	
INHB MSEQ	V58X1775E1	06	02	16601	VFY	ON			MECH	N03IS273D	
INHB MSEQ	V59X1925E1	06	03	16602	VFY	ON			MECH	N03IS274D	
INHB MSEQ	V76X0190W	06	04	17900	VFY	OFF			EPDC	N03IS275D	
INHB MSEQ	V76X0290W	06	05	17901	VFY	OFF			EPDC	N03IS276D	
INHB MSEQ	V76X0390W	06	06	17902	VFY	OFF			EPDC	N03IS277D	
INHB MSEQ	SUM7	06	07	18100	VFY	-350	350	PSID	FCL	N03IS278D	
INHB MSEQ	SUM8	06	08	18200	VFY	-350	350	PSID	FCL	N03IS279D	
INHB MSEQ	SUM9	06	09	18300	VFY	-350	350	PSID	FCL	N03IS280D	
INHB MSEQ	SUM10	06	10	18400	VFY	-350	350	PSID	FCL	N03IS281D	
INHB MSEQ	SUM11	06	11	18500	VFY	-350	350	PSID	FCL	N03IS282D	
INHB MSEQ	SUM12	06	12	18600	VFY	-350	350	PSID	FCL	N03IS283D	
INHB MSEQ	V57H0150A1	06	13	19016	VFY	-0.95	0.95	DEG	FCL	N03IS336D	
INHB MSEQ	V57H0151A1	06	14	19017	VFY	-0.95	0.95	DEG	FCL	N03IS341D	
INHB MSEQ	V57H0152A1	06	15	19018	VFY	-0.95	0.95	DEG	FCL	N03IS342D	
INHB MSEQ	V57H0153A1	06	16	19019	VFY	-0.95	0.95	DEG	FCL	N03IS343D	
INHB MSEQ	V57H0250A1	07	01	19020	VFY	2.45	7.55	DEG	FCL	N03IS272D	
INHB MSEQ	V57H0251A1	07	02	19021	VFY	2.45	7.55	DEG	FCL	N03IS273D	
INHB MSEQ	V57H0252A1	07	03	19022	VFY	2.45	7.55	DEG	FCL	N03IS274D	
INHB MSEQ	V57H0253A1	07	04	19023	VFY	2.45	7.55	DEG	FCL	N03IS275D	
INHB MSEQ	V90H6410C1	07	05	19024	VFY	-1.41	1.41	DEG	FCL	N03IS276D	
INHB MSEQ	SUM1	07	06	19200	VFY	-350	350	PSID	FCL	N03IS277D	
INHB MSEQ	SUM2	07	07	19300	VFY	-350	350	PSID	FCL	N03IS278D	
INHB MSEQ	SUM3	07	08	19400	VFY	-350	350	PSID	FCL	N03IS279D	
INHB MSEQ	SUM4	07	09	19500	VFY	-350	350	PSID	FCL	N03IS280D	
INHB MSEQ	SUM5	07	10	19600	VFY	-350	350	PSID	FCL	N03IS281D	
INHB MSEQ	SUM6	07	11	19700	VFY	-350	350	PSID	FCL	N03IS282D	
INHB MSEQ	N03IS009E	07	12	20400	VFY	ON			L02	N03IS283D	
INHB MSEQ	V45X1195E1	07	13	20700	VFY	ON			FCP	N03IS336D	
INHB MSEQ	V45X2195E1	07	14	20701	VFY	ON			FCP	N03IS341D	
INHB MSEQ	V79X3201E1	07	15	20800	VFY	OFF			FCL	N03IS342D	
INHB MSEQ	V79X3202E1	07	16	20801	VFY	OFF			FCL	N03IS343D	
INHB MSEQ	V79X3203E1	08	01	20802	VFY	OFF			FCL	N03IS272D	
INHB MSEQ	V79X3204E1	08	02	20803	VFY	OFF			FCL	N03IS273D	
INHB MSEQ	V79X3205E1	08	03	20804	VFY	OFF			FCL	N03IS274D	
INHB MSEQ	V79X3206E1	08	04	20805	VFY	OFF			FCL	N03IS275D	
INHB MSEQ	V79X3207E1	08	05	20806	VFY	OFF			FCL	N03IS276D	
INHB MSEQ	V79X3208E1	08	06	20807	VFY	OFF			FCL	N03IS277D	
INHB MSEQ	V79X3209E1	08	07	20808	VFY	OFF			FCL	N03IS278D	
INHB MLH2	N03IS007E	08	08	21600	VFY	ON			MPS	N03IS279D	



VFY TABLE & ROW ASSIGNMENTS

ELSE	FD	TAB	ROW	SEQ	1ST	ELSE	STATE-LIMITS	UNITS	SYSTEM	ROW	PSEUDO
INHR MSEQ	N03IS006E	08	09	27000	VFY	ON	ON	LH2	MPS	N03IS2800	
INHR MSEQ	T41X1730X1	08	10	22400	VFY	WET	WET	LH2	MPS	N03IS2810	
INHR MSEQ	T41X1731X1	08	11	22401	VFY	WET	WET	LH2	MPS	N03IS2820	
INHR MSEQ	T41X1732X1	08	12	22402	VFY	WET	WET	LH2	MPS	N03IS2830	
INHR MSEQ	T41X1733X1	08	13	22403	VFY	WET	WET	LH2	MPS	N03IS3360	
INHB MSEQ	V41X1555X1	08	14	22404	VFY	WET	WET	L02	MPS	N03IS3410	
INHB MSEQ	V41X1556X1	08	15	22405	VFY	WET	WET	L02	MPS	N03IS3420	
INHB MSEQ	V41X1557X1	08	16	22406	VFY	WET	WET	L02	MPS	N03IS3430	
INHR MSEQ	V41X1558X1	08	01	22407	VFY	WET	WET	L02	MPS	N03IS2720	
INHR MSEQ	V41X1807E1	08	02	22500	2 OF 2	ON	ON	MPS	MPS	N03IS2730	
INHR MSEQ	V41X1906E1	08	03	22501	2 OF 2	OFF	OFF	MPS	MPS	N03IS2740	
INHR MSEQ	V41X1529X1	08	04	22502	VFY	ON	ON	MPS	MPS	N03IS2750	
INHR MSEQ	V41X1530X1	08	05	22503	VFY	OFF	OFF	MPS	MPS	N03IS2760	
INHB MSEQ	V41X1534X1	08	06	22504	VFY	OFF	OFF	MPS	MPS	N03IS2770	
INHC MSEQ	V41X1382E1	08	07	22505	2 OF 2	ON	ON	MPS	MPS	N03IS2780	
INHR MSEQ	V41X1381E1	08	08	22506	2 OF 2	OFF	OFF	MPS	MPS	N03IS2790	
INHR MSEQ	V41X1429X1	08	09	22507	VFY	ON	ON	MPS	MPS	N03IS2800	
INHR MSEQ	V41X1430X1	08	10	22508	VFY	OFF	OFF	MPS	MPS	N03IS2810	
INHR MSEQ	V41X1434X1	08	11	22509	VFY	OFF	OFF	MPS	MPS	N03IS2820	
INHB MSEQ	V41X1409E1	08	12	22510	3 OF 3	OFF	OFF	MPS	MPS	N03IS2830	
INHR MSEQ	V41X1406E1	08	13	22511	3 OF 3	OFF	OFF	MPS	MPS	N03IS3360	
INHR MSEQ	V41X1405E1	08	14	22512	3 OF 3	ON	ON	MPS	MPS	N03IS3410	
INHR MSEQ	V41X1410X1	08	15	22513	VFY	ON	ON	MPS	MPS	N03IS3420	
INHB MSEQ	V41X1453E1	08	16	22514	2 OF 2	OFF	OFF	MPS	MPS	N03IS3430	
INHR MSEQ	V41X1453E1	10	01	22515	2 OF 2	OFF	OFF	MPS	MPS	N03IS2720	
INHR MSEQ	V41X1456X1	10	02	22516	VFY	ON	ON	MPS	MPS	N03IS2730	
INHB MSEQ	V41X1441E1	10	03	22517	2 OF 2	OFF	OFF	MPS	MPS	N03IS2740	
INHB MSEQ	V41X1449E1	10	04	22518	2 OF 2	ON	ON	MPS	MPS	N03IS2750	
INHR MSEQ	V41X1442E1	10	05	22519	VFY	ON	ON	MPS	MPS	N03IS2760	
INHB MSEQ	V41X1917E1	10	06	22520	2 OF 2	OFF	OFF	MPS	MPS	N03IS2770	
INHB MSEQ	V41X1911E1	10	07	22521	2 OF 2	OFF	OFF	MPS	MPS	N03IS2780	
INHB MSEQ	V41X1919X1	10	08	22522	VFY	ON	ON	MPS	MPS	N03IS2790	
INHB MSEQ	V41X1927E1	10	09	22523	2 OF 2	OFF	OFF	MPS	MPS	N03IS2800	
INHR MSEQ	V41X1931E1	10	10	22524	2 OF 2	OFF	OFF	MPS	MPS	N03IS2810	
INHB MSEQ	V41X1929X1	10	11	22525	VFY	ON	ON	MPS	MPS	N03IS2820	
INHR MSEQ	V41X1541E1	10	12	22526	2 OF 2	OFF	OFF	MPS	MPS	N03IS2830	
INHB MSEQ	V41X1549E1	10	13	22527	2 OF 2	ON	ON	MPS	MPS	N03IS3360	
INHB MSEQ	V41X1542E1	10	14	22528	VFY	ON	ON	MPS	MPS	N03IS3410	
INHR MSEQ	V41X1510E1	10	15	22529	3 OF 3	OFF	OFF	MPS	MPS	N03IS3420	
INHR MSEQ	V41X1506E1	10	16	22530	3 OF 3	OFF	OFF	MPS	MPS	N03IS3430	
INHR MSEQ	V41X1505E1	11	01	22531	3 OF 3	ON	ON	MPS	MPS	N03IS2720	
INHB MSEQ	V41X1509X1	11	02	22532	VFY	ON	ON	MPS	MPS	N03IS2730	
INHR MSEQ	LL1	11	04	22901	VFY	OFF	OFF	INTG	INTG	N03IS2750	
INHB MSEQ	LL1	11	05	22902	VFY	OFF	OFF	INTG	INTG	N03IS2760	

VFY TABLE & ROW ASSIGNMENTS

ELSE	FD	TAR	ROW	SEQ	1ST ELSE	STATE-LIMITS	UNITS	SYSTEM	ROW	PSEUDO
INHR MSEQ	INTNAME	11	06	22904	VFY	X0000		INTG	N03IS277D	
INHB MSEQ	LR1	11	07	22906	VFY	OFF		INTG	N03IS278D	
INHB MSEQ	LR1	11	08	22907	VFY	OFF		INTG	N03IS279D	
INHB MSEQ	INTNAME	11	09	22909	VFY	X0000		INTG	N03IS280D	
INHB MSEQ	GWDXP112E	11	10	23200	1 OF 2	ON		KWATR	N03IS281D	
INHB MSEQ	GWDXP109E	11	11	23201	1 OF 2	ON		KWATR	N03IS282D	
INHB MSEQ	LL2	11	12	23401	VFY	OFF		INTG	N03IS283D	
INHB MSEQ	LL2	11	13	23402	VFY	OFF		INTG	N03IS336D	
INHB MSEQ	INTNAME	11	14	23404	VFY	X0000		INTG	N03IS341D	
INHB MSEQ	LR2	11	15	23406	VFY	OFF		INTG	N03IS342D	
INHB MSEQ	LR2	11	16	23407	VFY	OFF		INTG	N03IS343D	
INHR MSEQ	INTNAME	12	01	23409	VFY	X0000		INTG	N03IS272D	
INHR MSEQ	N03ISOR2E	12	02	24200	VFY	OFF		LH2	N03IS273D	
INHB MSEQ	LL1/LR1	12	03	24401	VFY	X0000		INTG	N03IS274D	
INHR MSEQ	GSAX8221E	12	04	24500	1 OF 3	ON		GOX	N03IS275D	
INHR MSEQ	GSAX8222E	12	05	24501	1 OF 3	ON		GOX	N03IS276D	
INHR MSEQ	GSAX8191A	12	06	24502	1 OF 3	N0LO	2	GOX	N03IS277D	
INHB MSEQ	B79X1844X1	12	07	24600	VFY	ON		GNS	N03IS278D	
INHB MSEQ	B79X1845X1	12	08	24601	VFY	ON		GNS	N03IS279D	
INHB MSEQ	B79X1846X1	12	09	24602	VFY	ON		GNS	N03IS280D	
INHR MSEQ	B79X1847X1	12	10	24603	VFY	ON		GNS	N03IS281D	
INHR MSEQ	379X1343X1	12	11	24604	VFY	ON		GNS	N03IS282D	
INHB MSEQ	B79X1849X1	12	12	24605	VFY	ON		GNS	N03IS283D	
INHB MSEQ	B79X2844X1	12	13	24606	VFY	ON		GNS	N03IS336D	
INHB MSEQ	B79X2845X1	12	14	24607	VFY	ON		GNS	N03IS341D	
INHB MSEQ	B79X2846X1	12	15	24608	VFY	ON		GNS	N03IS342D	
INHR MSEQ	B79X2847X1	12	16	24609	VFY	ON		GNS	N03IS343D	
INHR MSEQ	379X2849X1	13	02	24611	VFY	ON		GNS	N03IS272D	
INHR MSEQ	V41X1513E1	13	07	24900	3 OF 3	OFF		MPS	N03IS273D	
INHB MSEQ	V41X1507E1	13	08	24901	3 OF 3	ON		MPS	N03IS278D	
INHB MSEQ	V41X1508E1	13	09	24902	3 OF 3	OFF		MPS	N03IS279D	
INHB MSEQ	V41X1514X1	13	10	24903	VFY	ON		MPS	N03IS280D	
INHB MSEQ	V41X1388E1	13	11	24920	3 OF 3	OFF		MPS	N03IS281D	
INHB MSEQ	V41X1385E1	13	12	24921	3 OF 3	ON		MPS	N03IS282D	
INHB MSEQ	V41X1386E1	13	13	24922	3 OF 3	OFF		MPS	N03IS283D	
INHB MSEQ	V41X1389X1	13	14	24923	VFY	ON		MPS	N03IS336D	
EXIT	B58P1311A1	13	15	27900	VFY	-990	+990	BHYD	N03IS341D	
EXIT	B58P1312A1	13	16	27901	VFY	-990	+990	BHYD	N03IS342D	
EXIT	B58P1313A1	14	01	27902	VFY	-990	+990	BHYD	N03IS343D	
EXIT	B58P1314A1	14	02	27903	VFY	-990	+990	BHYD	N03IS272D	
EXIT	B58P1315A1	14	03	27904	VFY	-990	+990	BHYD	N03IS273D	
EXIT	B58P1316A1	14	04	27905	VFY	-990	+990	BHYD	N03IS274D	
EXIT	B58P1317A1	14	05	27906	VFY	-990	+990	BHYD	N03IS275D	
EXIT	B58P1317A1	14	05	27906	VFY	-990	+990	BHYD	N03IS276D	

VFY TABLE 9 ROW ASSIGNMENTS

ELSE	FD	TAR ROW	SEQ	1ST ELSE	STATE-LIMITS	UNITS	SYSTEM	ROW PSEUDO
EXIT	B58P1318A1	14 06	27907	VFY	-990	PSID	BHYD	N03IS277D
EXIT	B58P2311A1	14 07	27906	VFY	-990	PSID	BHYD	N03IS278D
EXIT	B58P2312A1	14 08	27909	VFY	-990	PSID	BHYD	N03IS279D
EXIT	B58P2313A1	14 09	27910	VFY	-990	PSID	BHYD	N03IS280D
EXIT	B58P2314A1	14 10	27911	VFY	-990	PSID	BHYD	N03IS281D
EXIT	B58P2315A1	14 11	27912	VFY	-990	PSID	BHYD	N03IS282D
EXIT	B58P2316A1	14 12	27913	VFY	-990	PSID	BHYD	N03IS283D
EXIT	B58P2317A1	14 13	27914	VFY	-990	PSID	BHYD	N03IS336D
EXIT	B58P2318A1	14 14	27915	VFY	-990	PSID	BHYD	N03IS341D
MARK/GO	LL2/LR2	14 15	28001	VFY	X0000		INTG	N03IS342D
EXIT	GWDXT70E	14 16	28500	2 OF 3	ON		KWATR	N03IS343D
EXIT	GWDXT72E	15 01	28501	2 OF 3	ON		KWATR	N03IS272D
EXIT	GWDXT74E	15 02	28502	2 OF 3	ON		KWATR	N03IS273D
EXIT	GWDXT55E	15 03	28600	2 OF 3	ON		KWATR	N03IS274D
EXIT	GWDXT56E	15 04	28601	2 OF 3	ON		KWATR	N03IS275D
EXIT	GWDXT57E	15 05	28602	2 OF 3	ON		KWATR	N03IS276D
INHR MSEQ	*GIMCHKMPS	15 06	17701	VFY	ON		INTG	N03IS277D
INHR MSEQ	*AEROSDRCK	15 07	17001	VFY	ON		INTG	N03IS278D
INHR MSEQ	*GOXARMRET	15 08	20200	VFY	OFF		INTG	N03IS279D
EXIT	*SRRFCSHYD	15 09	26701	VFY	ON		INTG	N03IS280D
INHB MSEQ	N03IS010E	15 10	71318	VFY	ON		L02	N03IS281D
INHR MSEQ	V41T1428A1	15 11	22533	1 OF 2	N0LO	DEGF	MPS	N03IS282D
INHR MSEQ	GLHT4119A	15 12	22534	1 OF 2	N0LO	DEGF	MPS	N03IS283D
INHR MSEQ	N03IS0003E	15 13	71301	VFY	ON		L02	N03IS336D
INHB MSEQ	GCNX3123E	15 14	25101	1 OF 2	ON		CINT	N03IS341D
INHB MSEQ	GCNX3623E	15 15	25102	1 OF 2	ON		CINT	N03IS342D





VFY TABLE & ROW ASSIGNMENTS

ELSE	MSEQ	FD	TAB	ROW	SEQ	1ST	ELSE	STATE-LIMITS	UNITS	SYSTEM	ROW	PSEUDO
INHB	MSEQ	*AEROSDRCK	15	07	17001	VFY	ON			INTG	N03IS278D	
INHR	MSEQ	*GIMCHKMPS	15	06	17701	VFY	ON			INTG	N03IS277D	
INHB	MSEQ	*GOXARMRET	15	08	20200	VFY	OFF			INTG	N03IS279D	
EXIT		*SRBFCSHYD	15	09	26701	VFY	ON			INTG	N03IS280D	
INHB	MPS4	B55C1051C1	04	15	15310	VFY	.02	.75	AMP	BRS	N03IS342D	
INHB	MPS4	B55C2051C1	04	16	15311	VFY	.02	.75	AMP	BRS	N03IS343D	
INHB	MPS4	B55X1843X1	04	13	15308	VFY	OFF			BPYR	N03IS336D	
INHB	MPS4	B55X1860X1	04	10	15303	VFY	OFF			BRS	N03IS281D	
INHB	MPS4	B55X1870X1	04	07	15300	VFY	ON			BRS	N03IS278D	
INHR	MPS4	B55X2843X1	04	14	15309	VFY	OFF			BPYR	N03IS341D	
INHB	MPS4	B55X2860X1	04	11	15304	VFY	OFF			BRS	N03IS282D	
INHR	MPS4	B55X2870X1	04	08	15301	VFY	ON			BRS	N03IS279D	
EXIT		B58P1311A1	13	15	27900	VFY	-900	+900	PSID	BHYD	N03IS342D	
EXIT		B58P1312A1	13	16	27901	VFY	-900	+900	PSID	BHYD	N03IS343D	
EXIT		B58P1313A1	14	01	27902	VFY	-900	+900	PSID	BHYD	N03IS272D	
EXIT		B58P1314A1	14	02	27903	VFY	-900	+900	PSID	BHYD	N03IS273D	
EXIT		B58P1315A1	14	03	27904	VFY	-900	+900	PSID	BHYD	N03IS274D	
EXIT		B58P1316A1	14	04	27905	VFY	-900	+900	PSID	BHYD	N03IS275D	
EXIT		B58P1317A1	14	05	27906	VFY	-900	+900	PSID	BHYD	N03IS276D	
EXIT		B58P1318A1	14	06	27907	VFY	-900	+900	PSID	BHYD	N03IS277D	
EXIT		B58P2311A1	14	07	27908	VFY	-900	+900	PSID	BHYD	N03IS278D	
EXIT		B58P2312A1	14	08	27909	VFY	-900	+900	PSID	BHYD	N03IS279D	
EXIT		B58P2313A1	14	09	27910	VFY	-900	+900	PSID	BHYD	N03IS280D	
EXIT		B58P2314A1	14	10	27911	VFY	-900	+900	PSID	BHYD	N03IS281D	
EXIT		B58P2315A1	14	11	27912	VFY	-900	+900	PSID	BHYD	N03IS282D	
EXIT		B58P2316A1	14	12	27913	VFY	-900	+900	PSID	BHYD	N03IS283D	
EXIT		B58P2317A1	14	13	27914	VFY	-900	+900	PSID	BHYD	N03IS336D	
EXIT		B58P2318A1	14	14	27915	VFY	-900	+900	PSID	BHYD	N03IS341D	
INHR	MSEQ	B79X1844X1	12	07	24600	VFY	ON			GNS	N03IS278D	
INHB	MSEQ	B79X1845X1	12	08	24601	VFY	ON			GNS	N03IS279D	
INHB	MSEQ	B79X1846X1	12	09	24602	VFY	ON			GNS	N03IS280D	
INHB	MSEQ	B79X1847X1	12	10	24603	VFY	ON			GNS	N03IS281D	
INHB	MSEQ	B79X1848X1	12	11	24604	VFY	ON			GNS	N03IS282D	
INHB	MSEQ	B79X1849X1	12	12	24605	VFY	ON			GNS	N03IS283D	
INHB	MSEQ	B79X2844X1	12	13	24606	VFY	ON			GNS	N03IS336D	
INHB	MSEQ	B79X2845X1	12	14	24607	VFY	ON			GNS	N03IS341D	
INHB	MSEQ	B79X2846X1	12	15	24608	VFY	ON			GNS	N03IS342D	
INHB	MSEQ	B79X2847X1	12	16	24609	VFY	ON			GNS	N03IS343D	
INHB	MSEQ	B79X2848X1	13	01	24610	VFY	ON			GNS	N03IS272D	
INHR	MSEQ	B79X2849X1	13	02	24611	VFY	ON			GNS	N03IS273D	
INHB	MPS4	E41P1054B1	05	14	16000	VFY	2700	NOHI	PSIA	SSME	N03IS341D	
INHB	MPS4	E41P2054B1	05	15	16001	VFY	2700	NOHI	PSIA	SSME	N03IS342D	
INHB	MPS4	E41P3054B1	05	16	16002	VFY	2700	NOHI	PSIA	SSME	N03IS343D	
INHB	MSEQ	GCMX3123E	15	14	25101	1 OF 2	ON			CINT	N03IS341D	

VFY TABLE 8, ROW ASSIGNMENTS

ELSF	FD	TAR	ROW	SEQ	1ST	FLSE	STATE-LIMITS	UNITS	SYSTEM	ROW	PSEUDO
INHB MSEQ	GCNX3623E	15	15	25102	1	OF 2	ON		CINT	N03IS342D	
INHB MSEQ	GLHT4119A	15	12	22534	1	OF 2	N0LO		MPS	N03IS283D	
INHB MSEQ	GLOR4134A	03	10	18603	1	OF 3	N0LO	-412	L02	N03IS281D	
INHB MSEQ	GLOR4144A	03	09	18602	1	OF 3	N0LO	125	L02	N03IS280D	
INHB MSEQ	GLOR4644A	03	08	18601	1	OF 3	N0LO	.1	L02	N03IS279D	
INHB MSEQ	GLOX4143E	03	11	18604	2	OF 2	OFF	.1	L02	N03IS282D	
INHB MSEQ	GLOX4643F	03	12	18605	2	OF 2	OFF		L02	N03IS283D	
1 OF 4	GSAT8231A	04	05	14502	1	OF 4	N0LO	2	KARMS	N03IS276D	
INHB MSEQ	GSAT8336A	04	06	14503	1	OF 4	N0LO	2	KARMS	N03IS277D	
INHB MSEQ	GSAT8191A	00	15	24552	1	OF 6	N0LO	2	VG0X	N03IS342D	
INHB MSEQ	GSAT8191A	12	06	24502	1	OF 3	N0LO	2	GOX	N03IS277D	
INHB MSEQ	GSAT8196A	01	12	24555	1	OF 4	N0LO	2	VG0X	N03IS283D	
1 OF 4	GSAX7111E	02	07	13200	1	OF 4	OFF		KARMS	N03IS278D	
1 OF 4	GSAX7112E	02	09	13202	1	OF 4	ON		KARMS	N03IS280D	
1 OF 4	GSAX7113E	02	11	13204	1	OF 4	OFF		KARMS	N03IS282D	
1 OF 4	GSAX7114E	02	13	13206	1	OF 4	ON		KARMS	N03IS336D	
1 OF 4	GSAX7116E	02	08	13201	1	OF 4	OFF		KARMS	N03IS279D	
GTO ST200	GSAX7117E	02	10	13203	1	OF 4	ON		KARMS	N03IS281D	
1 OF 4	GSAX7118E	02	12	13205	1	OF 4	OFF		KARMS	N03IS283D	
GTO ST200	GSAX7119E	02	14	13207	1	OF 4	ON		KARMS	N03IS341D	
1 OF 4	GSAX7541E	02	01	13102	1	OF 4	OFF		KARMS	N03IS272D	
GTO ST200	GSAX7546E	02	02	13103	1	OF 4	OFF		KARMS	N03IS273D	
1 OF 4	GSAX7551E	01	15	13105	1	OF 4	ON		KARMS	N03IS342D	
1 OF 4	GSAX7556E	01	16	13101	1	OF 4	ON		KARMS	N03IS343D	
1 OF 4	GSAX7561E	02	05	13106	1	OF 4	OFF		KARMS	N03IS276D	
GTO ST200	GSAX7566E	02	06	13107	1	OF 4	OFF		KARMS	N03IS277D	
1 OF 4	GSAX7571E	02	03	13104	1	OF 4	ON		KARMS	N03IS274D	
1 OF 4	GSAX7576E	02	04	13105	1	OF 4	ON		KARMS	N03IS275D	
1 OF 4	GSAX7621E	04	04	14501	1	OF 4	ON		KARMS	N03IS275D	
1 OF 4	GSAX7626E	04	03	14500	1	OF 4	ON		KARMS	N03IS274D	
INHB MSEQ	GSAX8221E	00	13	24550	1	OF 6	ON		VG0X	N03IS336D	
INHB MSEQ	GSAX8231E	12	04	24500	1	OF 3	ON		GOX	N03IS275D	
INHB MSEQ	GSAX8222E	00	14	24551	1	OF 6	ON		VG0X	N03IS341D	
INHB MSEQ	GSAX8222E	12	05	24501	1	OF 3	ON		GOX	N03IS276D	
INHB MSEQ	GSAX8227E	01	11	24554	1	OF 6	ON		VG0X	N03IS282D	
INHB MSEQ	GSAX8336E	01	10	24553	1	OF 6	ON		VG0X	N03IS281D	
INHB MSEQ	GWDXPT09E	11	11	23201	1	OF 2	ON		KWATR	N03IS282D	
INHB MSEQ	GWDXPT12E	11	10	23200	1	OF 2	ON		KWATR	N03IS281D	
EXIT	GWDXPT15E	15	03	28600	2	OF 3	ON		KWATR	N03IS274D	
EXIT	GWDXPT16E	15	04	28601	2	OF 3	ON		KWATR	N03IS275D	
EXIT	GWDXPT17E	15	05	28602	2	OF 3	ON		KWATR	N03IS276D	
EXIT	GWDXPT170E	14	16	28500	2	OF 3	ON		KWATR	N03IS343D	
EXIT	GWDXPT172E	15	01	28501	2	OF 3	ON		KWATR	N03IS272D	
EXIT	GWDXPT174E	15	02	28502	2	OF 3	ON		KWATR	N03IS273D	

VFY TABLE & ROW ASSIGNMENTS

ELSE	FD	TAR	ROW	SEQ	1ST	ELSE	STATE-LIMITS	UNITS	SYSTEM	ROW	PSEUDO
INHB MSEQ	INTNAME	11	06	22904	VFY	X0000			INTG	N03IS277D	
INHB MSEQ	INTNAME	11	09	22909	VFY	X0000			INTG	N03IS280D	
INHB MSEQ	INTNAME	11	14	23404	VFY	X0000			INTG	N03IS341D	
INHB MSEQ	INTNAME	12	01	23409	VFY	X0000			INTG	N03IS272D	
INHB MSEQ	LL1	11	04	22901	VFY	OFF			INTG	N03IS275D	
INHB MSEQ	LL1	11	05	22902	VFY	OFF			INTG	N03IS276D	
INHB MSEQ	LL1/LR1	12	03	24401	VFY	X0000			INTG	N03IS274D	
INHB MSEQ	LL2	11	12	23401	VFY	OFF			INTG	N03IS283D	
INHB MSEQ	LL2	11	13	23402	VFY	OFF			INTG	N03IS336D	
MARK/GO	LL2/LR2	14	15	28001	VFY	X0000			INTG	N03IS342D	
INHB MSEQ	LR1	11	07	22906	VFY	OFF			INTG	N03IS278D	
INHB MSEQ	LR1	11	08	22907	VFY	OFF			INTG	N03IS279D	
INHB MSEQ	LR2	11	15	23406	VFY	OFF			INTG	N03IS342D	
INHB MSEQ	LR2	11	16	23407	VFY	OFF			INTG	N03IS343D	
INHB MSEQ	N03IS006E	08	09	22000	VFY	ON			LH2	N03IS280D	
INHB MLH2	N03IS007E	08	08	21600	VFY	ON			MPS	N03IS279D	
INHB MPS4	N03IS008E	15	13	71301	VFY	ON			L02	N03IS336D	
INHB MSEQ	N03IS009E	07	12	20400	VFY	ON			L02	N03IS283D	
INHB MPS4	N03IS010E	15	10	71318	VFY	ON			L02	N03IS281D	
INHB MSEQ	N03IS082E	12	02	24200	VFY	OFF			LH2	N03IS273D	
INHB MSEQ	SUM1	07	06	19200	VFY	-350	350	PSID	FCL	N03IS277D	
INHB MSEQ	SUM10	06	10	18400	VFY	-350	350	PSID	FCL	N03IS281D	
INHB MSEQ	SUM11	06	11	18500	VFY	-350	350	PSID	FCL	N03IS282D	
INHB MSEQ	SUM12	06	12	18600	VFY	-350	350	PSID	FCL	N03IS283D	
INHB MSEQ	SUM2	07	07	19300	VFY	-350	350	PSID	FCL	N03IS278D	
INHB MSEQ	SUM3	07	08	19400	VFY	-350	350	PSID	FCL	N03IS279D	
INHB MSEQ	SUM4	07	09	19500	VFY	-350	350	PSID	FCL	N03IS280D	
INHB MSEQ	SUM5	07	10	19600	VFY	-350	350	PSID	FCL	N03IS281D	
INHB MSEQ	SUM6	07	11	19700	VFY	-350	350	PSID	FCL	N03IS282D	
INHB MSEQ	SUM7	06	07	18100	VFY	-350	350	PSID	FCL	N03IS278D	
INHB MSEQ	SUM8	06	08	18200	VFY	-350	350	PSID	FCL	N03IS279D	
INHB MSEQ	SUM9	06	09	18300	VFY	-350	350	PSID	FCL	N03IS280D	
INHB MSEQ	T41X1730X1	08	10	22400	VFY	WET			LH2	N03IS281D	
INHB MSEQ	T41X1731X1	08	11	22401	VFY	WET			LH2	N03IS282D	
INHB MSEQ	T41X1732X1	08	12	22402	VFY	WET			LH2	N03IS283D	
INHB MSEQ	T41X1733X1	08	13	22403	VFY	WET			LH2	N03IS336D	
INHB MPS4	T55X1869X1	04	12	15305	VFY	OFF			TRS	N03IS283D	
INHB MPS4	T55X1870X1	04	09	15302	VFY	ON			TRS	N03IS280D	
INHB MPS4	V41T1151A1	05	02	15700	1 OF 3	10	95	DEGF	MPS	N03IS273D	
INHB MPS4	V41T1152A1	05	05	15703	1 OF 3	60	145	DEGF	MPS	N03IS276D	
INHB MPS4	V41T1251A1	05	03	15701	1 OF 3	10	95	DEGF	MPS	N03IS274D	
INHB MPS4	V41T1252A1	05	06	15704	1 OF 3	60	145	DEGF	MPS	N03IS277D	
INHR MPS4	V41T1351A1	05	04	15702	1 OF 3	10	95	DEGF	MPS	N03IS275D	
INHB MPS4	V41T1352A1	05	07	15705	1 OF 3	60	145	DEGF	MPS	N03IS278D	



VFY TABLE & ROW ASSIGNMENTS

ELSE	FD	TAR	ROW	SEQ	1ST	FLSE	STATE-LIMITS	UNITS	SYSTEM	ROW	PSEUDO
INHR	MSEQ	V41T1429A1	15	11	22535	1	OF 2	NOL0	MPS	N03IS282D	
INHR	MSEQ	V41X1331E1	00	08	22506	2	OF 2	OFF	MPS	N03IS279D	
INHR	MSEQ	V41X1382E1	00	07	22505	2	OF 2	ON	MPS	N03IS278D	
INHR	MSEQ	V41X1385E1	13	12	24921	3	OF 3	ON	MPS	N03IS283D	
INHR	MSEQ	V41X1386E1	13	13	24922	3	OF 3	OFF	MPS	N03IS336D	
INHR	MSEQ	V41X1388E1	13	11	24920	3	OF 3	OFF	MPS	N03IS282D	
INHR	MSEQ	V41X1389X1	13	14	24923	VFY	ON	ON	MPS	N03IS341D	
INHR	MSEQ	V41X1405E1	00	14	22512	3	OF 3	ON	MPS	N03IS341D	
INHR	MSEQ	V41X1406E1	00	13	22511	3	OF 3	OFF	MPS	N03IS336D	
INHR	MSEQ	V41X1409E1	00	12	22510	3	OF 3	OFF	MPS	N03IS283D	
INHR	MSEQ	V41X1410X1	00	15	22513	VFY	ON	ON	MPS	N03IS342D	
INHR	MSEQ	V41X1429X1	00	09	22507	VFY	ON	ON	MPS	N03IS280D	
INHR	MSEQ	V41X1430X1	00	10	22508	VFY	OFF	OFF	MPS	N03IS281D	
INHR	MSEQ	V41X1434X1	00	11	22509	VFY	OFF	OFF	MPS	N03IS282D	
INHR	MSEQ	V41X1441E1	10	03	22517	2	OF 2	OFF	MPS	N03IS274D	
INHR	MSEQ	V41X1442E1	10	05	22519	VFY	ON	ON	MPS	N03IS276D	
INHR	MSEQ	V41X1449E1	10	04	22518	2	OF 2	ON	MPS	N03IS275D	
INHR	MSEQ	V41X1453E1	00	16	22514	2	OF 2	OFF	MPS	N03IS343D	
INHR	MSEQ	V41X1456X1	10	02	22516	VFY	ON	ON	MPS	N03IS273D	
INHR	MSEQ	V41X1458E1	10	01	22515	2	OF 2	OFF	MPS	N03IS272D	
INHR	MSEQ	V41X1505E1	11	01	22531	3	OF 3	ON	MPS	N03IS272D	
INHR	MSEQ	V41X1506E1	10	16	22530	3	OF 3	OFF	MPS	N03IS343D	
INHR	MSEQ	V41X1507E1	13	08	24901	3	OF 3	ON	MPS	N03IS279D	
INHR	MSEQ	V41X1508E1	13	09	24902	3	OF 3	OFF	MPS	N03IS280D	
INHR	MSEQ	V41X1509X1	11	02	22532	VFY	ON	ON	MPS	N03IS273D	
INHR	MSEQ	V41X1510E1	10	15	22529	3	OF 3	OFF	MPS	N03IS342D	
INHR	MSEQ	V41X1513E1	13	07	24900	3	OF 3	OFF	MPS	N03IS278D	
INHR	MSEQ	V41X1514X1	13	10	24903	VFY	ON	ON	MPS	N03IS281D	
INHR	MSEQ	V41X1529X1	00	04	22502	VFY	ON	ON	MPS	N03IS275D	
INHR	MSEQ	V41X1530X1	00	05	22503	VFY	OFF	OFF	MPS	N03IS276D	
INHR	MSEQ	V41X1534X1	00	06	22504	VFY	OFF	OFF	MPS	N03IS277D	
INHR	MSEQ	V41X1541E1	10	12	22526	2	OF 2	OFF	MPS	N03IS283D	
INHR	MSEQ	V41X1542E1	10	14	22528	VFY	ON	ON	MPS	N03IS341D	
INHR	MSEQ	V41X1549E1	10	13	22527	2	OF 2	ON	MPS	N03IS336D	
INHR	MSEQ	V41X1555X1	00	14	22404	VFY	WET	WET	L02	N03IS341D	
INHR	MSEQ	V41X1556X1	00	15	22405	VFY	WET	WET	L02	N03IS342D	
INHR	MSEQ	V41X1557X1	00	16	22406	VFY	WET	WET	L02	N03IS343D	
INHR	MSEQ	V41X1558X1	09	01	22407	VFY	WET	WET	L02	N03IS272D	
INHR	MSEQ	V41X1806E1	00	03	22501	2	OF 2	OFF	MPS	N03IS274D	
INHR	MSEQ	V41X1807E1	00	02	22500	2	OF 2	ON	MPS	N03IS273D	
INHR	MSEQ	V41X1911E1	10	07	22521	2	OF 2	OFF	MPS	N03IS278D	
INHR	MSEQ	V41X1917E1	10	06	22520	2	OF 2	OFF	MPS	N03IS277D	
INHR	MSEQ	V41X1919X1	10	08	22522	VFY	ON	ON	MPS	N03IS279D	
INHR	MSEQ	V41X1921E1	10	10	22524	2	OF 2	OFF	MPS	N03IS281D	

VFY TABLE & ROW ASSIGNMENTS

ELSE	FD	TAB	ROW	SEQ	1ST FLSE	STATE-LIMITS	UNITS	SYSTEM	ROW PSEUDO
INHB MSEQ	V41X1927E1	10	09	22523	2 OF 2	OFF		MPS	N03IS280D
INHB MSEQ	V41X1929X1	10	11	22525	VFY	ON		MPS	N03IS282D
INHB MSEQ	V45X1195E1	07	13	20700	VFY	ON		FCP	N03IS336D
INHB MSEQ	V45X2195E1	07	14	20701	VFY	ON		FCP	N03IS341D
INHB MSEQ	V57H0150A1	06	13	19016	VFY	-0.95	DEG	FCL	N03IS336D
INHB MSEQ	V57H0151A1	06	14	19017	VFY	-0.95	DEG	FCL	N03IS341D
INHB MSEQ	V57H0152A1	06	15	19018	VFY	-0.95	DEG	FCL	N03IS342D
INHB MSEQ	V57H0153A1	06	16	19019	VFY	-0.95	DEG	FCL	N03IS343D
INHB MSEQ	V57H0250A1	07	01	19020	VFY	2.45	DEG	FCL	N03IS272D
INHB MSEQ	V57H0251A1	07	02	19021	VFY	2.45	DEG	FCL	N03IS273D
INHB MSEQ	V57H0252A1	07	03	19022	VFY	2.45	DEG	FCL	N03IS274D
INHB MSEQ	V57H0253A1	07	04	19023	VFY	2.45	DEG	FCL	N03IS275D
INHB MPS4	V58P0115A1	05	08	15900	VFY	2850	PSIA	HYD	N03IS279D
INHB MPS4	V58P0116C1	05	09	15901	VFY	2800	PSIA	HYD	N03IS280D
INHB MPS4	V58P0215A1	05	10	15902	VFY	2850	PSIA	HYD	N03IS281D
INHB MPS4	V58P0216C1	05	11	15903	VFY	2800	PSIA	HYD	N03IS282D
INHB MPS4	V58P0315A1	05	12	15904	VFY	2850	PSIA	HYD	N03IS283D
INHB MPS4	V58P0316C1	05	13	15905	VFY	2800	PSIA	HYD	N03IS336D
INHB MAPU	V58S0172E1	03	02	13803	VFY	ON		HYD	N03IS273D
INHB MAPU	V58S0173E1	03	05	13806	VFY	ON		HYD	N03IS276D
INHB MAPU	V58S0272E1	03	03	13804	VFY	ON		HYD	N03IS274D
INHB MAPU	V58S0273E1	03	06	13807	VFY	ON		HYD	N03IS277D
INHB MAPU	V58S0372E1	03	04	13805	VFY	ON		HYD	N03IS275D
INHB MAPU	V58S0373E1	03	07	13808	VFY	ON		HYD	N03IS278D
INHB MAPU	V58X0182E1	02	15	13800	VFY	ON		HYD	N03IS342D
INHB MAPU	V58X0282E1	02	16	13801	VFY	ON		HYD	N03IS343D
INHB MAPU	V58X0382E1	03	01	13802	VFY	ON		HYD	N03IS272D
INHB MSEQ	V58X1725E1	06	01	16600	VFY	ON		MECH	N03IS272D
INHB MSEQ	V58X1775E1	06	02	16601	VFY	ON		MECH	N03IS273D
INHB MSEQ	V58X1825E1	06	03	16602	VFY	ON		MECH	N03IS274D
INHB MAPU	V75T2517A1	03	14	14401	3 OF 3	N0LO	DEGF	INST	N03IS341D
INHB MAPU	V75T2617A1	04	01	14404	3 OF 3	N0LO	DEGF	INST	N03IS272D
INHB MAPU	V75X2523E1	03	15	14402	3 OF 3	ON		INST	N03IS342D
INHB MAPU	V75X2529E1	03	13	14400	3 OF 3	ON		INST	N03IS336D
INHB MAPU	V75X2623E1	04	02	14405	3 OF 3	ON		INST	N03IS273D
INHB MAPU	V75X2629E1	03	16	14403	3 OF 3	ON		INST	N03IS343D
INHB MSEQ	V76X0190W	06	04	17900	VFY	OFF		EPDC	N03IS275D
INHB MSEQ	V76X0290W	06	05	17901	VFY	OFF		EPDC	N03IS276D
INHB MSEQ	V76X0390W	06	06	17902	VFY	OFF		EPDC	N03IS277D
INHB MSEQ	V79X3201E1	07	15	20800	VFY	OFF		FCL	N03IS342D
INHB MSEQ	V79X3202E1	07	16	20801	VFY	OFF		FCL	N03IS343D
INHB MSEQ	V79X3203E1	08	01	20802	VFY	OFF		FCL	N03IS272D
INHB MSEQ	V79X3204E1	08	02	20803	VFY	OFF		FCL	N03IS273D
INHB MSEQ	V79X3205E1	08	03	20804	VFY	OFF		FCL	N03IS274D

VFY TABLE & ROW ASSIGNMENTS

ELSE	FD	TAB	ROW	SEQ	1ST ELSE	STATE-LIMITS	UNITS	SYSTEM	ROW PSEUDO
INHB MSEQ	V79X3206E1	03	04	20805	VFY	OFF		FCL	N03IS275D
INHB MSEQ	V79X3207E1	03	05	20806	VFY	OFF		FCL	N03IS276D
INHR MSEQ	V79X3208E1	03	06	20807	VFY	OFF		FCL	N03IS277D
INHB MSEQ	V79X3209E1	03	07	20808	VFY	OFF		FCL	N03IS278D
INHR MSEQ	V0H6410C1	07	05	19024	VFY	-1.41	DEG	FCL	N03IS276D
INHB MAPU	XEGPVQ09A	01	07	13653	1 OF 3	N0LO	FT	VARMS	N03IS278D
INHD MOAA	XEGXVR03E	01	03	13300	1 OF 2	ON		VARMS	N03IS274D
INHB MAPU	XEGXVB13E	01	05	13651	1 OF 3	ON		VARMS	N03IS276D
INHB MOAA	XEGXVB53E	01	01	12200	1 OF 2	ON		VARMS	N03IS272D
INHB MOAA	XEGXVC03E	01	04	13301	1 OF 2	ON		VARMS	N03IS275D
INHR MAPU	XEGXVC13E	01	06	13652	1 OF 3	ON		VARMS	N03IS277D
INHR MOAA	XEGXVC53E	01	02	12201	1 OF 2	ON		VARMS	N03IS273D
INHR MSEQ	XWDPVF44A	01	08	25001	1 OF 2	N0LO	PSIG	VWATR	N03IS279D
INHB MSEQ	XWDPVF54A	01	09	25002	1 OF 2	N0LO	PSIG	VWATR	N03IS280D
EXIT	XWDXVB23F	00	01	28650	1 OF 2	ON		VWATR	N03IS272D
EXIT	XWDXVB33E	00	02	28652	1 OF 2	ON		VWATR	N03IS273D
EXIT	XWDXVB43E	00	03	28654	1 OF 2	ON		VWATR	N03IS274D
EXIT	XWDXVR53E	00	04	28656	1 OF 2	ON		VWATR	N03IS275D
EXIT	XWDXVB63E	00	05	28658	1 OF 2	ON		VWATR	N03IS276D
INHB MSEQ	XWDXVC03E	00	11	23850	1 OF 2	ON		VWATR	N03IS282D
INHB MSEQ	XWDXVC13E	00	12	23851	1 OF 2	ON		VWATR	N03IS283D
EXIT	XWDXVC23E	00	06	28651	1 OF 2	ON		VWATR	N03IS277D
EXIT	XWDXVC33E	00	07	28653	1 OF 2	ON		VWATR	N03IS278D
EXIT	XWDXVC43E	00	08	28655	1 OF 2	ON		VWATR	N03IS279D
EXIT	XWDXVC53E	00	09	28657	1 OF 2	ON		VWATR	N03IS280D
EXIT	XWDXVC63E	00	10	28659	1 OF 2	ON		VWATR	N03IS281D

TABLE	(A)(B)(C)(D)(E)(F)															'HEX ROW VALUE	FAIL PSEUDO	VOTING LOGIC PSEUDO	MASK PSEUDO	
	8000	4000	2000	1000	0800	0400	0200	0100	0080	0040	0020	0010	0008	0004	0002					0001
1	+																8FEC	191	216	241
2	+																8FEC	192	217	242
3	+																8FEC	193	218	243
4	+																8FEC	194	219	244
5	+																8FEC	195	220	245
6	+																8FEC	196	221	246
7	+																8FEC	197	222	247
8	+	3/2															8FEC	198	223	248
9	+																8FEC	199	224	249
(A) 10	+																8FEC	200	225	250
(B) 11	+	3/2															8FE8	201	226	251
(C) 12	+																8FE8	202	227	252
(D) 13	+																8FA8	203	228	253
(E) 14	+	3/2															8FA8	204	229	254
(F) 15	+																8FA8	205	230	255
(10) 16	+																8FA8	206	231	256
(11) 17	+	3/2															8FA8	207	232	257
(12) 18	+																8FA8	208	233	258
(13) 19	+																8FA8	209	234	259
(14) 20	+	3/2															8FA8	210	235	260
(15) 21	+																8FA8	211	236	261
(16) 22	+																8FA8	212	237	262
(17) 23	+	3/2															8FA8	213	238	263
(18) 24	+																8F98	214	239	264
(19) 25	+																8F98	215	240	265
(1A) 26	\$																4F98	170	309	351
(1B) 27	\$																4F98	171	310	352
(1C) 28	\$																4F98	172	311	353
(1D) 29	\$																4F98	173	312	354
(1E) 30	\$																4F98	177	313	355
(1F) 31	\$																4F98	178	314	356
(20) 32	\$																4F98	179	315	357
(21) 33	\$																4F98	180	316	358
(22) 34	\$																4F98	181	317	359
(23) 35	\$																4F98	182	318	360
(24) 36	\$																4F98	183	319	361
(25) 37	\$																4F98	184	320	362
(26) 38	\$																4F98	185	321	363
(27) 39	\$																0F98	186	322	364
(28) 40	\$																4F88	187	323	365
(29) 41	\$																0F88	188	324	366
(2A) 42	\$																4F88	189	325	367
(2B) 43	\$																0FC8	190	326	368
(2C) 44	\$																4FC8	286	327	369
(2D) 45	%																2FC8	287	328	370
(2E) 46	%																2F58	288	329	371
(2F) 47	%																2F58	301	332	372
(30) 48	%																1F58	302	335	373
(31) 49	%																1F58	303	340	374
(32) 50	%																1F48	308	348	375

\* - M009 - LCC 1  
: - MOAA

\$ - MAPU - LCC 2  
% - MPS4

" - MLO2  
I - MLH2

- MSEQ - LCC 3  
-- MENG - LCC 4

X - MSRB  
/ - CPER

& - EXIT  
? - GOTO

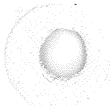
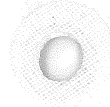
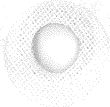


TABLE  
8000  
4000  
2000  
1000  
0800  
0400  
0200  
0100  
0080  
0040  
0020  
0010  
0008  
0004  
0002  
0001  
(A)(B)(C)(D)(E)(F)  
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

HEX  
ROW  
VALUE

FAIL  
PSEUDO

VOTING  
LOGIC  
PSEUDO

MASK  
PSEUDO

W	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	HEX ROW VALUE	FAIL PSEUDO	VOTING LOGIC PSEUDO	MASK PSEUDO
	+	+														CFDO	051	101	001
	+	+	2													CFDO	052	102	002
	+	+	8													EFDO	053	103	003
	+	+	8													AFDO	054	104	004
	+	+	8													AFCD	055	105	005
	+	+														AFCO	056	106	006
	+	+														AFCO	057	107	007
	+	+														EFCO	058	108	008
	+	+														DFCO	059	109	009
(A)	+	+														DFCO	060	110	010
(B)	+	+														DFCO	061	111	011
(C)	+	+														DFCO	062	112	012
(D)	+	+														DFCO	063	113	013
(E)	+	+														DFCO	064	114	014
(F)	+	+														DFCO	065	115	015
(10)	+	+														DFCO	066	116	016
(11)	+	+														DFCO	067	117	017
(12)	+	+														DFCO	068	118	018
(13)	+	+														DFCO	069	119	019
(14)	+	+														9FCO	070	120	020
(15)	+	+														9FCO	071	121	021
(16)	+	+														9F40	072	122	022
(17)	+	+														9FCO	073	123	023
(18)	+	+														9FCO	074	124	024
(19)	+	+														8FCO	075	125	025
(1A)	+	+														8FCO	076	126	026
(1B)	+	+														8FCO	077	127	027
(1C)	+	+														8FCO	078	128	028
(1D)	+	+														9FCO	079	129	029
(1E)	+	+														9FCO	080	130	030
(1F)	+	+														9FA0	081	131	031
(20)	+	+														9FA0	082	132	032
(21)	+	+														9FA0	083	133	033
(22)	+	+														9FA0	084	134	034
(23)	+	+														9FA0	085	135	035
(24)	+	+														9FA0	086	136	036
(25)	+	+														9FA0	087	137	037
(26)	+	+														9FA0	088	138	038
(27)	+	+														9FA0	089	139	039
(28)	+	+														9FA0	090	140	040
(29)	+	+														9FA0	091	141	041
(2A)	+	+														9FA0	092	142	042
(2B)	+	+														9FA0	093	143	043
(2C)	+	+														9FA0	094	144	044
	+	+														9FA0	095	145	045
	+	+														9FA0	096	146	046
	+	+														9FA0	097	147	047
(30)	+	+														9FA0	098	148	048
(31)	+	+														9F20	099	149	049
(32)	+	+														9F20	100	150	050

\* - M009 - LCC 1    \$ - MAPU - LCC 2    - MLO2    - MSEQ - LCC 3    X - MSRB  
 :- MOAA    % - MPS4    I - MLH2    -- MENG - LCC 4    / - CPER    & - EXIT  
 ? - GOTO

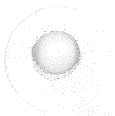
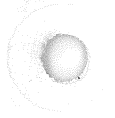
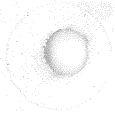


TABLE	8000	4000	2000	1000	0800	0400	0200	0100	0080	0040	0020	0010	0008	0004	0002	0001
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

(A)(B)(C)(D)(E)(F)

HEX  
ROW  
VALUE

FAIL  
PSEUDO

VOTING  
LOGIC  
PSEUDO

MASK  
PSEUDO

(A)	1	&	?	?	?	?	?	?	?	?	?	?	?	?	?	?	FBFF	272		154
	2	&	?	?	?	?	?	?	?	?	?	?	?	?	?	?	FFFF	273		155
	3	&	?	?	?	?	?	?	?	?	?	?	?	?	?	?	FFFB	274		156
	4	&	?	?	?	?	?	?	?	?	?	?	?	?	?	?	FFFB	275		157
	5	&	?	?	?	?	?	?	?	?	?	?	?	?	?	?	FFFB	276		158
	6	&	?	?	?	?	?	?	?	?	?	?	?	?	?	?	FFFB	277		159
	7	&	?	?	?	?	?	?	?	?	?	?	?	?	?	?	FFFF	278		163
	8	&	?	?	?	?	?	?	?	?	?	?	?	?	?	?	FFFF	279		164
	9	&	?	?	?	?	?	?	?	?	?	?	?	?	?	?	FFFF	280		165
(A)	10	&	?	?	?	?	?	?	?	?	?	?	?	?	?	?	FFFF	281		166
(B)	11	&	?	?	?	?	?	?	?	?	?	?	?	?	?	?	BFFF	282		338
(C)	12	&	?	?	?	?	?	?	?	?	?	?	?	?	?	?	BFFF	283		339
(D)	13	&	?	?	?	?	?	?	?	?	?	?	?	?	?	?	BFFF	336		337
(E)	14	&	?	?	?	?	?	?	?	?	?	?	?	?	?	?	BFFE	341		344
(F)	15	&	?	?	?	?	?	?	?	?	?	?	?	?	?	?	FFFE	342		345
(10)	16	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	7FFE	343		346
(11)	17																0000	152		167
(12)	18																0000	161		454
(13)	19																			
(14)	20																			
(15)	21																			
(16)	22																			
(17)	23																			
(18)	24																			
(19)	25																			
(1A)	26																			
(1B)	27																			
(1C)	28																			
(1D)	29																			
(1E)	30																			
(1F)	31																			
(20)	32																			
(21)	33																			
(22)	34																			
(23)	35																			
(24)	36																			
(25)	37																			
(26)	38																			
(27)	39																			
(28)	40																			
(29)	41																			
(2A)	42																			
(2B)	43																			
(2C)	44																			
(2D)	45																			
(2E)	46																			
(2F)	47																			
(30)	48																			
(31)	49																			
(32)	50																			

\* - MO09 - LCC 1      \$ - MAPU - LCC 2      ! - MLO2      - MSEQ - LCC 3      X - MSRB      & - EXIT  
 : - MOAA              % - MPS4              ! - MLH2      -- MENG - LCC 4      / - CPER      ? - GOTO



